Environmental Management Performance Report

April 2001

Demolition of Supply Fan Rooms at D Reactor

24-inch Manway Removal at Hexone Tank 142

Tramming Materials at 600-23 Landfill

Focused on Progress...
Focused on Outcomes!

Financial/Performance Measures data as of month-end February.
All other data as of March 22 (unless otherwise noted).

Department of Energy
Richland Operations Office

Bechtel Hanford, Inc.
Environmental Restoration Contractor

E0103132.3

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

ENVIRONMENTAL RESTORATION

MARCH 2001

TABLE OF CONTENTS

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
APRIL 2001

INTRODUCTION

The monthly Environmental Restoration (ER) Environmental Management Performance Report consists of three sections: Section A - Executive Summary, Section B - Restoring the River Corridor Project Summaries, and Section C - Transitioning the Central Plateau Project Summaries. All cost, schedule, milestone commitments, performance measures, and safety data is current as of February 28. Accomplishments, Issues and Integration items are current as of March 22, unless otherwise noted.

Section A – Executive Summary. This section provides an executive level summary of Bechtel Hanford, Inc.'s (BHI) performance information for the current reporting month and is intended to bring to Management's attention that information considered to be most noteworthy. The Executive Summary begins with a description of notable accomplishments that are considered to have made the greatest contribution toward safe, timely, and cost-effective cleanup. Major commitments are summarized that encompass Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones, and FY01 Environmental Management (EM) corporate performance measures. Safety statistics are also included. Issues that require management and/or regulator attention and resolution status are addressed. Fiscal year-to-date ERC Project cost and schedule variance analysis is summarized. The Key Integration Activities section highlights site activities that cross contractor boundaries and demonstrates the shared value of working as a team to accomplish the work. The Executive Summary ends with a listing of major upcoming planned key events within a 90-day period.

Section B – Restoring the River Corridor. This section contains more detailed monthly activity information and performance status for the three projects within the 'Restoring the River Corridor' outcome. These three projects consist of the Remedial Action and Waste Disposal (RAWD) Project, Decommissioning Projects, and the Program Management and Support (PM&S) Project.

Section C – Transitioning the Central Plateau. This section contains more detailed monthly activity information and performance status for the two projects within the 'Transitioning the Central Plateau' outcome. These two projects consist of the Groundwater/Vadose Zone (GW/VZ) Integration Project and the Surveillance/Maintenance and Transition (SM&T) Projects.

Information in this report is identified with a green, yellow, or red text box used as an indicator of the overall status. Green indicates work or issue resolution is satisfactory and generally meets or exceeds requirements; yellow indicates that significant improvement is required; and red indicates unsatisfactory conditions requiring immediate corrective actions.

Section A: Executive Summary

SECTION A – EXECUTIVE SUMMARY

Financial / Performance Measures data as of month-end February.
All other data as of March 22, 2001 (unless otherwise noted).

NOTABLE ACCOMPLISHMENTS:

RIVER CORRIDOR:

Excavation activities in support of the 100 B/C pipeline remediation were initiated on February 26 satisfying TPA Milestone M-16-26D, "Begin Excavation Activities at 100 B/C Process Effluent Pipelines" (due February 28).

Backfill activities in the 100 D Area were completed on February 28 (five months ahead of milestone date) satisfying TPA Milestone M-16-07B, "Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units" (due July 31).

Excavation was initiated for the large plume from the 116-F-14 Retention Basin in the 100 F Area.

Environmental Restoration Contractor (ERC) Cultural Resource specialists and representatives from the Wannapum and Nez Perce tribes participated in archeological excavations at the north end of Lewis Canal in the 100 F Area. Several artifacts were collected including organic samples for radiocarbon dating.

Preparation activities were initiated in support of 100 H Area backfill operations that are scheduled to begin in early April. Laboratory testing for the 100 H Area hexavalent chromium leachate study was initiated.

Training and mockups were performed with the manufacturer of the diamond wire saw that will be used for cutting the 116-N-3 crib distribution trough located in the 100 N Area. This resulted in adjustments to the means and methods for cutting and lifting of the trough sections, which will reduce worker exposure. Cutting the trough into sections will be completed in March.

A baseline change proposal (BCP) is being prepared to treat and dispose the 78 uranium oxide powder drums that are currently staged in the 618-4 Burial Ground in the 300 Area. This workscope would be performed in lieu of initiating treatment of the uranium metal/oil drums this fiscal year.

Excavation and sorting of soil and debris at the 600-23 waste site were completed except for two small areas pending results of analysis. A plan is being established to sample the drums that were unearthed at 600-23.

Reactor Interim Safe Storage (ISS) activities progressed at F, DR, D, and H Reactors in the 100 Area. Surveys were taken on the lower fill material from the F Reactor fuel storage basin (FSB). Results showed only one area with higher dose rates than the rest of the basin, with a few areas showing slightly elevated dose rates. Mapping of the F Reactor FSB was also completed. Preliminary mapping data are inconclusive as to whether any fuel remains in the FSB. Mapping will continue into March. During February, all remaining DR Reactor concrete pourbacks were completed. Asbestos abatement activities were completed in both the H and D Reactor FSB areas. Demolition and loadout activities were started in a few miscellaneous areas in D Reactor.

During February, 233-S Plutonium Concentration Facility work activities included the removal of the L-18 vessel eleven days ahead of schedule. This is the first of 15 vessels that are planned for removal by June 2002. Activities were also initiated in preparation for removal of the next vessel (L-1).

Green

NOTABLE ACCOMPLISHMENTS continued:

On February 15, the president of Bechtel Hanford, Inc. (BHI) presented a $13,000 contribution to the Richland Seniors Association. The contribution helped the Association to meet its commitment to the City of Richland to raise $100,000 for the new Richland Community Center.

ERC's nomination of the Small Diameter Geophysical Logging System in the "Return on Investment" category of the U.S. Department of Energy (DOE) National Pollution Prevention Award Program was selected as a winning entry. A second nomination for the successful implementation of Value Methodology in waste minimization was chosen as runner-up in the "Waste/Pollution Prevention" category.

The Long Range Plan (LRP) graphical wall charts were distributed during February. The LRP contains both the current (FY01) and new (FY02) work breakdown structures.

CENTRAL PLATEAU:

The Groundwater/Vadose Zone (GW/VZ) Integration Project completed input files for overall history matching. Completion of these files was the last major activity that needed to be done prior to running the System Assessment Capability (SAC) model as an integrated capability.

The annual report, "Hanford Site Groundwater Monitoring for Fiscal Year 2000" was completed on February 28 as planned.

Pacific Northwest National Laboratory (PNNL) completed analysis of the 115 wells available for decommissioning in River Corridor Phase 1A and 1B. This well decommissioning is in support of the superstretch performance incentive to decommission 90 wells.

Installation of five Resource Conservation and Recovery Act (RCRA) wells remains on schedule for completion by the end of April, in order to satisfy Tri-Party Agreement Milestones M-24-49 and M-24-50. The third of the five RCRA wells was installed in February.

All groundwater pump and treat systems operated above the planned 90% availability levels in February. Since system inception, the five pump and treat systems have processed over 4.8 billion liters of groundwater, removing approximately 5,131 kilograms of carbon tetrachloride, 227 kilograms of chromium, and 0.97 curies of strontium. Approximately 495 million liters of groundwater have been processed in FY01, removing approximately 549 kilograms of carbon tetrachloride, 33 kilograms of chromium, and 0.082 curies of strontium.

Site surveillance and maintenance (S&M) activities proceeded in February to ensure inactive facility integrity and safety. Interim stabilization was completed for the 218-W-2A waste burial site. Initial mobilization and pre-job briefings were completed for the 216-B-24 retention basin interim stabilization effort. The hexone in-tank sampling operations were initiated.

Green

MAJOR COMMITMENTS:

Tri-Party Agreement Milestones:

Green

Sixteen TPA milestones are currently planned for completion during FY01. Through February, nine milestones have been completed, all ahead of schedule.

Two TPA milestones were completed during February. TPA Milestone M-16-26D, "Begin Excavation Activities at 100 B/C Process Effluent Pipelines" (due February 28) was completed on February 26. TPA Milestone M-16-07B, "Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units" (due July 31) was completed on February 28 (five months ahead of schedule).

One milestone is currently unrecoverable. A TPA change request will be prepared in the May timeframe to revise M-16-03E, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (Excluding the 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling", (due September 30, 2001). Per regulator request, backfill/regrade in the 300 Area is being deferred until a Kd uranium leachability study is completed.

Total Tri-Party Agreement Milestones Due in FY01	***16***
Total Planned Through February	*8*
Total Completed Through February	*9*

Remaining Tri-Party Agreement Milestones to be Completed in FY01	***7***
Forecast Ahead of Schedule	*3*
Forecast On Schedule	*3*
**Forecast Unrecoverable*	*1*

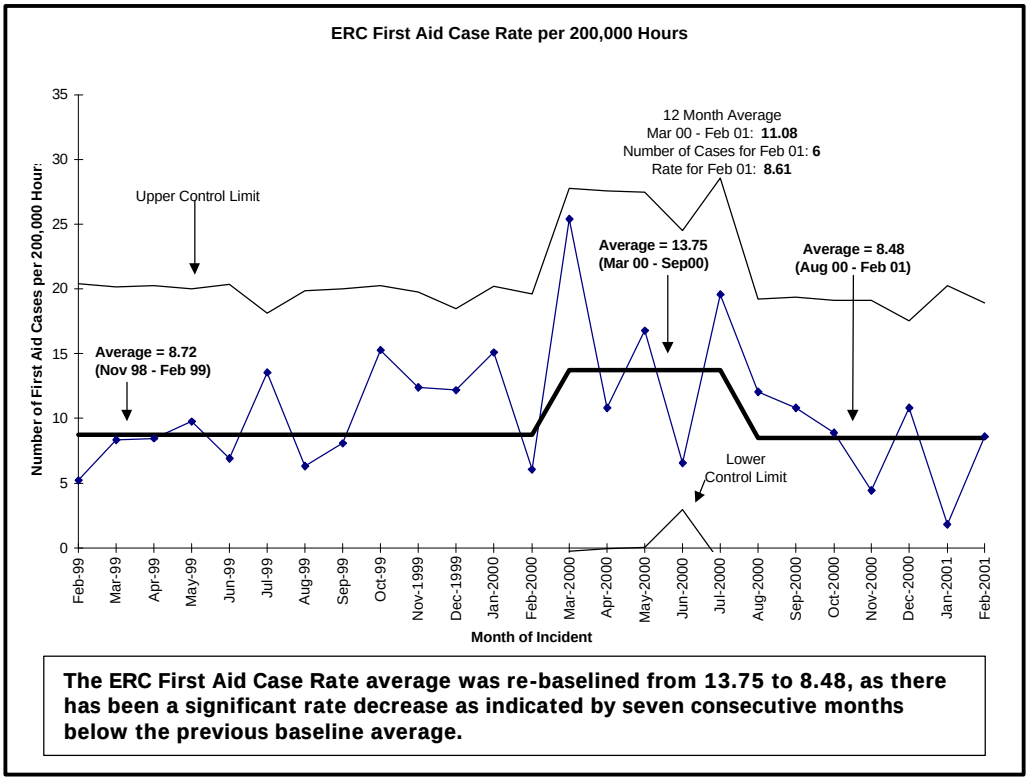
**Regulators concur with path forward to realign milestone date.*

EM Corporate Performance Measures:

	DWP FY01	FY01 Mgmt Commitments	Current Baseline	Forecast for FY01	Completed YTD
Waste Site Excavations	*12*	*12*	*20*	*20*	*5*
Technology Deployments	*0*	*5*	*6*	*6*	*4*

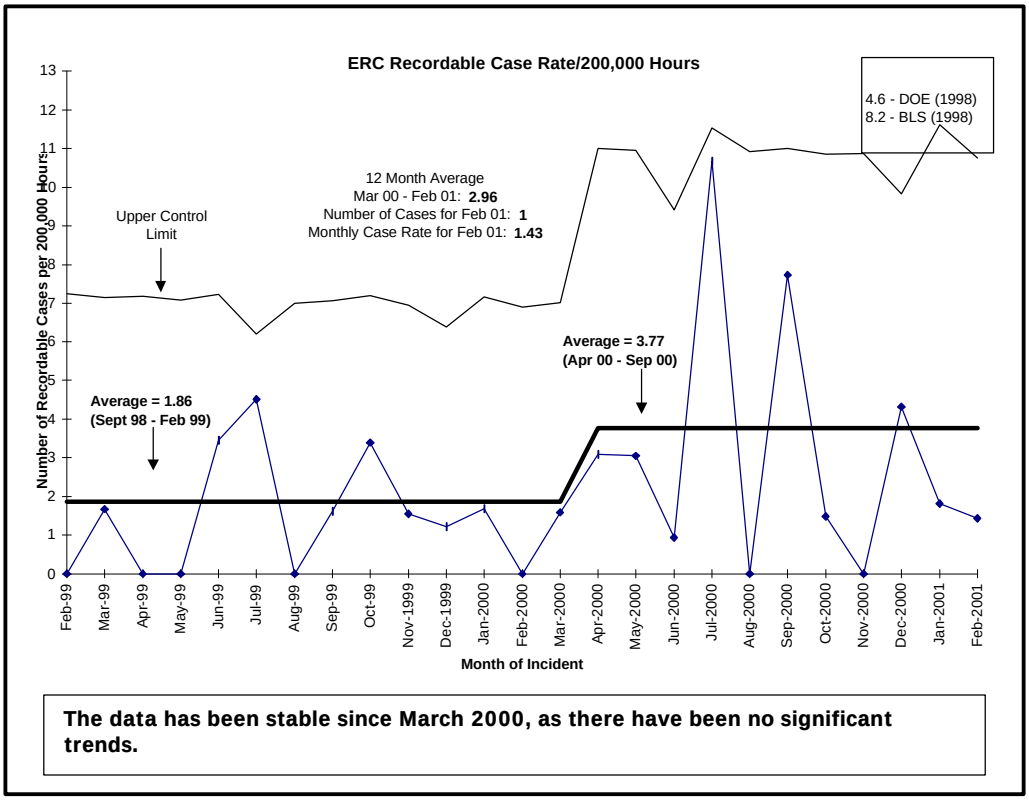
Green

SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract only):



Green

The ERC First Aid Case Rate average was re-baselined from 13.75 to 8.48, as there has been a significant rate decrease as indicated by seven consecutive months below the previous baseline average.

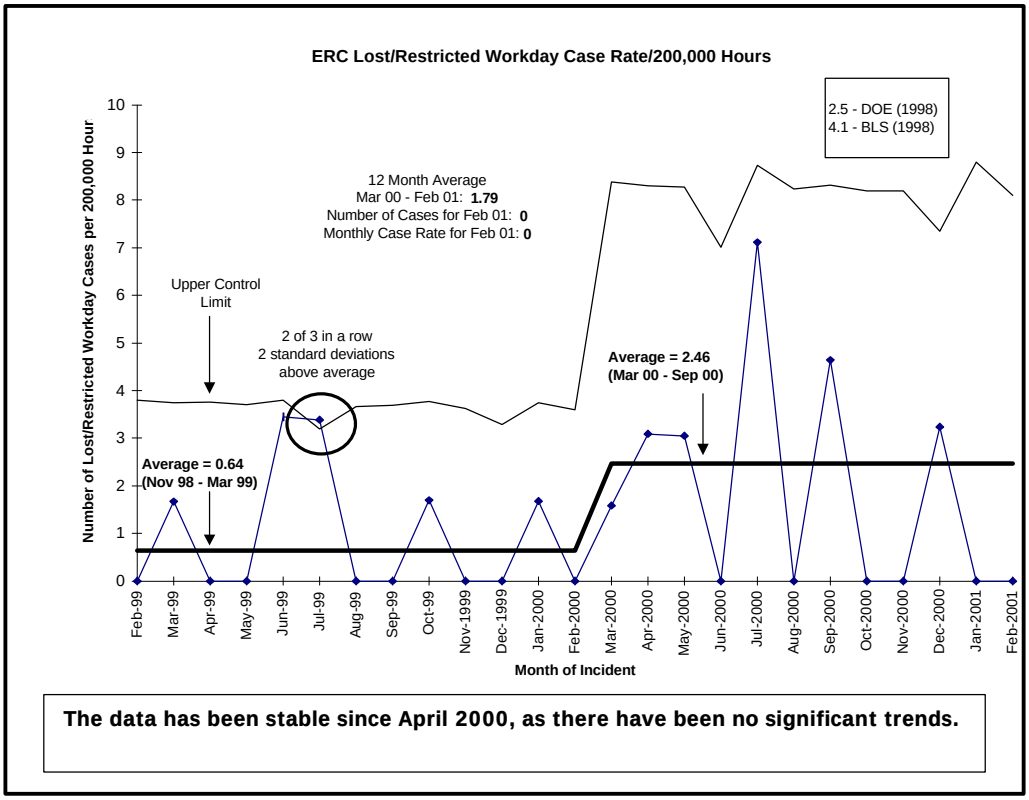


Green

The data has been stable since March 2000, as there have been no significant trends.

SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Green



The following actions have or are being taken by the ERC to focus on safety improvement:

- *Individual injury cases are thoroughly investigated and Lessons Learned reported.*
- *Continue to look for trends and consult with corporate and other Bechtel National, Inc. (BNI) contacts for ways to enhance performance.*
- *Senior management continues to meet with small groups of employees in the field to discuss safety and personal commitment.*
- *Implementation of the new hazard evaluation process continues to be a major area of focus for the ERC.*
- *Since safety incidents tend to increase in the spring/summer period, ERC is preparing for a one-hour standdown in May to focus on personal and worker safety.*

Eberline Services Hanford, Inc. (formally Thermo Hanford, Inc.) recently completed three years without a lost-workday accident – from February 10, 1998 to February 10, 2001. ESHI provides radiological control and industrial hygiene services on the ER project, as a preselected subcontractor to BHI.

SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract) continued:

Safety:

	YTD	Current Month (Feb)	Current Month Comments
First Aid	*27*	*6*	*(2) strains, (2) contusions/abrasions, (1) pain, (1) laceration*
OSHA Recordable	*7*	*1*	*(1) laceration to the left eyebrow (D&D worker was uncoiling an extension cord, using a whipping motion which caused the plug to fly up and hit his eyebrow.)*
Restricted Workday Case	*1*	*0*	*N/A*
Lost Workday Case	*2*	*0*	*N/A*

Green

The ERC, as of March 17, 2001, reports 277,100 hours since the last lost workday incident. The incident occurred on July 17, 2000 and became a lost time on January 17, 2001.

SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract only) continued:

ISMS:

DOE EM Performance Agreement: Maintain and improve the approved Integrated Safety Management System (ISMS).

Green

Status:

- *Field Support held a meeting to evaluate and discuss process improvements relative to the ERC hazards identification and analysis process. A hazard identification champion has been identified within the ERC.*
- *Continued efforts to obtain the services of an ISMS coordinator for the ERC.*
- *Conducted a three-day workshop to develop ISMS metrics.*
- *Projects and functional personnel continue to have an open dialogue on the process improvements relative to the Corrective Action Request (CAR) procedure. A schedule for revision to the CAR procedure has been established.*
- *Continued employee awareness of ISMS through the ISMS Question of the Day Program.*
- *BHI met on two occasions with RL to discuss primary drivers for performance measurement/indicators. These include:*
  DEAR 48 CFR 970.5204-2, "Laws, regulations, and DOE directives"
  DOE Policy 450.5, "Line Environment, Safety and Health Oversight"
  DOE Order 210.1, "Performance Indicators and Analysis of Operations Information"
  DOE Order 440.1A, "Worker Protection Management for Federal and Contractor Employees"
  DOE Order 430.1A, "Life Cycle Asset Management"
  DOE Order 224.1, "Contractor Performance-Based Business Management Process"

  RL is considering one contractor requirement document (CRD) that encompasses all of these drivers for indicators. Different organizations in RL are driving similar efforts related to performance measures/indicators. It was recommended that efforts be integrated. Two of the drivers (224.1 and the DEAR clause) are currently in BHI's contract.

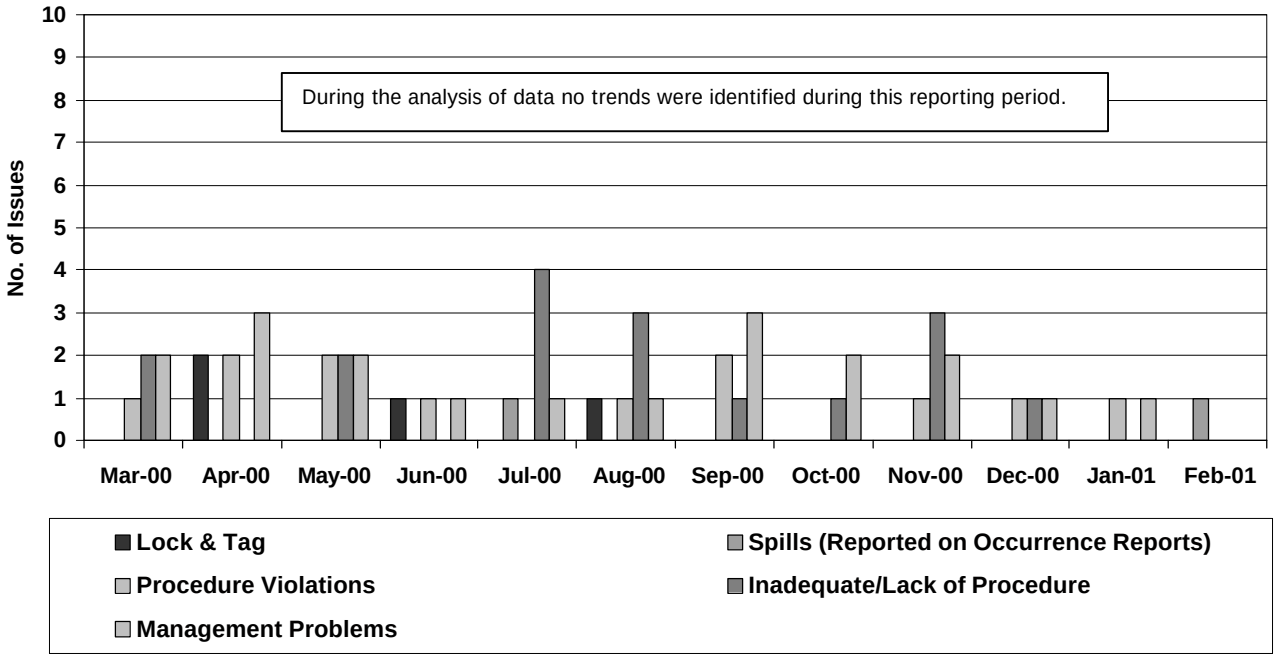
SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Conduct of Ops:

ERC-CATS (Corrective Action Tracking System) Trend Data 3/1/00 through 2/28/01

	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01
Lock & Tag	0	2	0	1	0	1	0	0	0	0	0	0
Spills (Reported on Occurrence Reports)	0	0	0	0	1	0	0	0	0	0	0	1
Procedure Violations	1	2	2	1	0	1	2	0	1	1	1	0
Inadequate/Lack of Procedure	2	0	2	0	4	3	1	1	3	1	0	0
Management Problems	2	3	2	1	1	1	3	2	2	1	*1	0

* Trend data not received until February 2001.



Each potential trend is reviewed and evaluated for impact on the project, and then given the appropriate level of attention based on a graded approach.

February Conduct of Operations Issues Continued on Next Page...

SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract only) continued:

February Conduct of Operations Issues:

Spills (Reported on Occurrence Reports):

Condition Description: *On February 13, 2001, an Environmental Restoration Contractor (ERC) subcontractor was excavating the 600-23-11 waste site. Records indicated that this site was used to dispose of miscellaneous construction materials in the mid-late 1970's. At approximately 4:00 p.m., the subcontractor notified ERC that they had unearthed five, 55-gallon drums, breaching one of them with the trackhoe bucket. It was estimated that about 20 gallons of liquid spilled into the soil. The subcontractor checked the drum contents for organic vapors and explosive vapors and found none. An ERC Radiological Control Technician (RCT) checked the drums for radioactivity and found none. Based on visual observation, the drum contents appeared to be a petroleum-based product. The subcontractor stopped work around the drums and planned to address how to proceed the next day. On the morning of February 14, the subcontractor discussed a plan to excavate and overpack the drummed waste with continuous Industrial Hygiene (IH) and RCT monitoring. The subcontractor Health and Safety Officer felt the information being collected from the field instruments was adequate information to continue work. Later in the morning, the ERC Site Safety Officer (SSO) was informed of the subcontractor determination. By this time, approximately 20 drums were placed in overpack containers and staged in a secure area. Continuous IH monitoring of the operation was completed and no volatile or explosive gases were detected. In addition, all of the excavated and overpacked drums were surveyed for radioactivity and none was found. The ERC IH manager and ERC SSO met with the subcontractor SSO and project manager later in the afternoon. The ERC IH manager reviewed the morning activities of the subcontractor. The IH manager and Project Management determined that there may be a potential OSHA violation with proceeding to handle the drums upon discovery without upgrading personal protective equipment (PPE). There is no indication of exposure to a hazardous substance, however, the drum contents were not known and the subcontractor proceeded to handle the drums with only Level D PPE. This appears to violate the OSHA requirements for handling unknown liquids, which require Level B PPE.*

Corrective Action Plan: *A final Corrective Action Plan for this concurrence has not been completed at this time. It will be drafted to allow finalization of the occurrence report by April 1, 2001. Corrective actions taken to date include: Management expectations for Health and Safety Plan (HASP) compliance and timely notifications have been discussed with ERC and subcontractor personnel involved with the 600-23 remediation work. The Remedial Action and Waste Disposal (RAWD) Project Manager met with the subcontractor's Vice President on February 21, 2001 to explain ERC's expectations of compliance to procedural, contractual, and regulatory requirements with specific emphasis on compliance to the HASP. A formal letter on these topics was issued to the subcontractor on that same day. The letter also required the subcontractor to prepare a written drum handling plan before proceeding with sampling, drum excavation, and overpacking activities. The subcontractor provided a draft drum handling plan on February 28, 2001. ERC incorporated the drum handling plan into a Site Specific Instruction (SSI), titled "Site Specific Instruction for the 600-23 Dump Site Drummed Waste Handling and Opening", SSI No. 1, Rev. 0, March 6, 2001. On March 7, 2001 the subcontractor submitted an Activity Hazard Analysis (AHA) for handling, overpacking, and staging the excavated drums at 600-23 in level B PPE. ERC reviewed and concurred with the new AHA. A draft lessons learned is being prepared to prevent future occurrences of this type of incident.*

Green

SAFETY / ISMS / CONDUCT OF OPERATIONS (Total ER Contract only) continued:

Previous Conduct of Operations Issues Not Reported Until February:

Management Problem:

Condition Description: *Potential Unreviewed Safety Question (USQ) involving the PUREX ventilation system.*

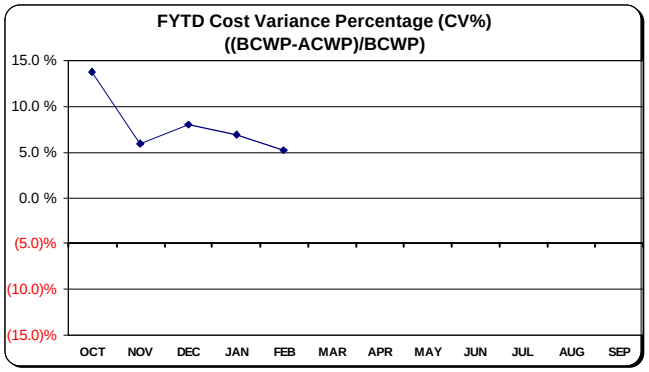
Corrective Action Plan: *(1) Implement a policy to determine correction factors to adjust future readings from the Samcon system until such time as the system is repaired or replaced. Target Completion Date: 3/31/01. (2) Determine whether to repair or replace the Samcon system, and then identify the target date for completion. Track the repair/replacement implementation schedule in an internal tracking system. Target Completion Date: 3/31/01.*

Green

REGULATORY / EXTERNAL / DOE-RL & HQ ISSUES AND REQUESTS:

Refer to individual Project issues in the following Section B and Section C.

TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract incl. RL/PNNL):

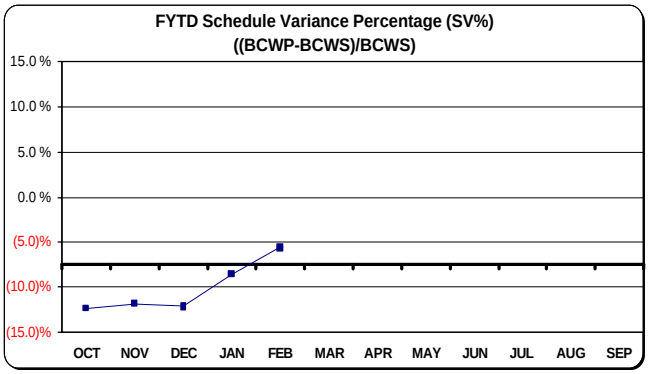


Green

Target performance is better than –5.0%.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Out-Year FCST
CURRENT PERIOD													
ACWP	9,656	10,998	11,610	12,274	13,040								
BCWP	11,195	10,749	13,140	12,755	12,916								
FISCAL YEAR TO DATE													
ACWP	9,656	20,654	32,264	44,538	57,578								
BCWP	11,195	21,944	35,085	47,839	60,755								
CV	1,539	1,290	2,820	3,301	3,177								
CV%	13.7%	5.9%	8.0%	6.9%	5.2%								
EAC (Cumulative)	9,656	20,654	32,264	44,538	57,578	72,601	90,396	105,746	120,586	137,212	151,030	166,012	166,118
Yr End Budget Variance	195	544	2,241	2,200	2,274								

For variance explanation by PBS, see Project Status Section of each project.



Green

Target performance is better than –7.5%.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	11,110	10,286	12,233	10,282	10,058	11,813	14,703	11,619	11,559	13,381	11,497	13,404
DWP (Accum)	11,110	21,396	33,629	43,911	53,968	65,781	80,484	92,103	103,662	117,043	128,540	141,944
CURRENT PERIOD												
BCWS	12,782	12,103	15,015	12,418	12,003	13,912	17,714	13,919	13,696	15,778	13,826	15,225
BCWP	11,195	10,749	13,140	12,755	12,916							
FISCAL YEAR TO DATE												
BCWS	12,782	24,885	39,900	52,318	64,322	78,234	95,948	109,866	123,563	139,340	153,166	168,391
BCWP	11,195	21,944	35,085	47,839	60,755							
SV	(1,587)	(2,940)	(4,815)	(4,479)	(3,566)							
SV%	-12.4%	-11.8%	-12.1%	-8.6%	-5.5%							

For variance explanation by PBS, see Project Status Section of each project.

TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract incl. RL/PNNL) continued:

FY01 PERFORMANCE
FYTD FEBRUARY 2001
($K)

	FY01 DWP	CURRENT	FYTD			YTD SCHEDULE VARIANCE		YTD COST VARIANCE		
	BCWS	BCWS	BCWS	BCWP	ACWP	$	%	$	%	EAC
ER01 100 Area R/A	29617	31056	11435	11735	10084	300	2.6%	1651	14.1%	28801
ER03 300 Area R/A	4127	2788	1053	798	760	-255	-24.2%	38	4.8%	2711
ER04 ER Waste Disposal	17420	18474	7120	7332	6636	212	3.0%	696	9.5%	18056
RA-Subtotal	**51164**	**52318**	**19608**	**19865**	**17480**	**257**	**1.3%**	**2385**	**12.0%**	**49568**
ER02 200 Area R/A	443	4214	889	711	639	-178	-20.0%	72	10.1%	4186
ER08 GW Management	24942	30509	10865	10121	10277	-744	-6.8%	-156	-1.5%	31011
VZ01 GW/VZ	10833	11184	4763	4162	4098	-601	-12.6%	64	1.5%	11253
GW/VZ-Subtotal	**36218**	**45907**	**16517**	**14994**	**15014**	**-1523**	**-9.2%**	**-20**	**-0.1%**	**46450**
ER06 D&D	2065	12431	5038	4894	4272	-144	-2.9%	622	12.7%	11993
ER06 - 233-S	5130	6363	2479	2339	2618	-140	-5.6%	-279	-11.9%	6485
DD-Subtotal	**7195**	**18794**	**7517**	**7233**	**6890**	**-284**	**-3.8%**	**343**	**4.7%**	**18478**
ER05 S&M	13024	13712	6362	5619	5614	-743	-11.7%	5	0.1%	13707
ER07 Long-Term S&M	59	59	4	4	0	0	0.0%	4	100.0%	55
SM-Subtotal	**13083**	**13771**	**6366**	**5623**	**5614**	**-743**	**-11.7%**	**9**	**0.2%**	**13762**
ER10 ERC PM&S	28984	31221	12025	11847	11385	-178	-1.5%	462	3.9%	31478
ER10 RL PM&S	5300	6381	2288	1194	1194	-1094	-47.8%	0	0.0%	6381
PM-Subtotal	**34284**	**37602**	**14313**	**13041**	**12579**	**-1272**	**-8.9%**	**462**	**3.5%**	**37859**
GRAND TOTAL	**141944**	**168392**	**64321**	**60756**	**57577**	**-3565**	**-5.5%**	**3179**	**5.2%**	**166117**

Green

Cost/Schedule Status:

Cost Variance Summary

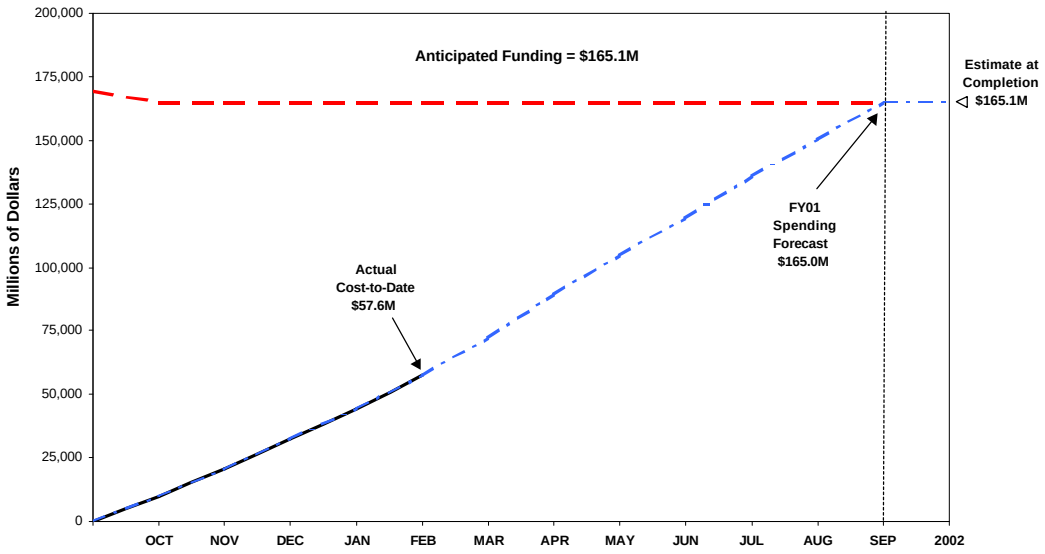
At the end of February, the ER Project had performed $60.8M worth of work, at a cost of $57.6M. This results in a favorable cost variance of $3.2M (+5.2%). The positive cost variance is attributed to less labor required due to sharing resources between 100 D and 100 B/C remediation; 100 D Area backfill completed early; less labor required to complete remediation Cleanup Verification Packages (CVPs) due to use of a streamlined format and consolidation of waste sites; less Environmental Restoration Disposal Facility (ERDF) transportation labor performing scope without planned overtime; and less mobilization costs for DR and H Reactors Interim Safe Storage (ISS) than planned.

Schedule Variance Summary

Through February, the ER Project is $3.6M (-5.5%) behind schedule. The negative schedule variance is attributed to 200-CW-1 feasibility study and proposed plan being deferred to address land use and ecological data requirements; contaminated soil encountered during RCRA well drilling; waste shipments from RCRA wells placed on hold pending disposition resolution; delays in groundwater monitoring sample collection and analysis activities; additional time required to solicit potential bidders and to implement RL-directed guidance for virtual library software methodology; delivery of ISS Brokk equipment taking longer than planned; additional time required to evaluate new hexone tank sampling and video equipment; and late billings for site-wide assessments.

TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract) continued:

FY2001 Funds Management



			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	2002	
	ANTICIPATED FUNDING		169,632	165,100	165,100	165,100	165,100	165,100	165,100	165,100	165,100	165,100	165,100	165,100	Est. Outyr. ETC	EAC TOTAL
	APPROVED SCOPE															
1	**Actual Cost**		9,656	20,654	32,264	44,538	57,578									
2	**Current Monthly EACs**		9,656	10,998	11,610	12,274	13,040	15,022	17,796	15,350	14,838	16,626	13,820	14,983		
3	**Cumulative EAC**		9,656	20,654	32,264	44,538	57,578	72,600	90,396	105,746	120,584	137,210	151,030	166,013	105	166,119
	MARCH FY2001 APPROVED BCP'S (Through 03/20/01)															
4	ER01/04	BCP-21112 Delete 21.6 Tons of Contaminated Soil to ERDF								(90)	(100)				0	(190)
5	ER01/04	BCP-21113 Additional Plumes at 116-F-2								150	168				0	318
6	ER08	BCP-21039 Well Maintenance FY00 Carrover Scope Reduction (PNNL)						(203)							0	(203)
7	ER02	BCP-21119 Add Assessment Tasks at 200-CW-1/Defer Feasibility Study into FY02						(39)							0	(39)
8	**Subtotal Approved Scope Changes**							**(203)**	**0**	**60**	**68**	**0**	**0**	**0**	**0**	**(75)**
	FY2001 PENDING BCP'S															
9	ALL	Provisional Billing Rate Adjustment											700		0	700
10	ER10	Implement DOE Order 5400.5 Radiation Protection of Public & Environment						10	23	23	23	23	24	24	0	150
11	ALL	Pending Scope FY01 Additions/Reductions/Efficiencies						(256)	(256)	(256)	(256)	(256)	(257)	(257)	0	(1,794)
12	**Subtotal Approved BCPs + Pending BCPs**							**(449)**	**(233)**	**(173)**	**(165)**	**(233)**	**467**	**(233)**	**0**	**(1,019)**
13	**Current Monthly EAC + March FY2001 Approved BCP's & Pending BCP's**		**9,656**	**10,998**	**11,610**	**12,274**	**13,040**	**14,573**	**17,563**	**15,177**	**14,673**	**16,393**	**14,287**	**14,750**		**-**
14	**Cumulative EAC + March FY2001 Approved BCP's & Pending BCP's**		**9,656**	**20,654**	**32,264**	**44,538**	**57,578**	**72,151**	**89,714**	**104,891**	**119,564**	**135,957**	**150,244**	**164,994**	**105**	**165,100**

PERFORMANCE OBJECTIVES:

Refer to individual Project information in the following Section B and Section C.

KEY INTEGRATION ACTIVITIES:

RIVER CORRIDOR:

FH Safeguards and Security issued a letter to ERC that outlined the security measures that must be taken by ERC in the event fuel is found in the FSB.

ERC worked with FH to establish a recycling credit for the Hanford Site's sanitary waste stream. The sanitary waste is hauled to the Roosevelt landfill where it is used to generate electricity from the methane gas produced. A 70% recycling credit was given for the Site's sanitary waste. This recycling effort will exceed the Secretary of Energy's goal to reduce sanitary waste by 50% before 2006.

Several planning meetings and reviews were attended and supported during February. On February 7, a review of the Site Strategic Plan Master Logic for the GW/VZ Projects was chaired by FH. ERC provided updates to the Plan, which was prepared by PNNL, to reflect the recent ER Baseline Update. On February 13, the Central Plateau planning meeting was chaired by RL and was supported by FH, PNNL and ERC. These meetings were held in preparation for the Hanford Advisory Board (HAB) meeting held on March 6.

ERC continued ongoing coordination activities with RL, PNNL, and FH to develop a Hanford Cleanup Summary Schedule. This schedule is to display key areas of River Corridor, Central Plateau, and Office of River Protection workscope for FY02 through FY46.

Several fields within the Integrated Priority List (IPL) database (which is maintained by FH) were updated with data from the recent ER Baseline Update in support of Hanford Site IPL activities.

Green

UPCOMING PLANNED KEY EVENTS:

Tri-Party Agreement Milestone M-24-49, Install 3 Additional Wells at SST WMA S-SX, due 4/30/01.

Tri-Party Agreement Milestone M-24-50, Install 2 Additional Wells at SST WMA TX-TY, due 4/30/01.

Green

Environmental Management Performance Report

April 2001

Section B - River Corridor Information

- **Remedial Action and Waste Disposal Project**
- **Decommissioning Projects (Interim Safe Storage and 233-S)**
- **Program Management and Support**

L-18 Vessel Original Installation

116-N-3 Crib Size Reduction and Soil Mixing

Final Piece of L-18 Vessel being Removed

Focused on Progress...
Focused on Outcomes!

Financial/Performance Measures data as of month-end February.
All other data as of March 22 (unless otherwise noted).

Department of Energy
Richland Operations Office

Bechtel Hanford, Inc.
Environmental Restoration Contractor

E0103132.1

Remedial Action and Waste Disposal Project (RAWD)

SECTION B – RESTORING THE RIVER CORRIDOR

Financial / Performance Measures data as of month-end February.
All other data as of March 22, 2001 (unless otherwise noted).

Remedial Action & Waste Disposal Project (RAWD):

ACCOMPLISHMENTS: *RAWD*

ERDF Transportation and Operations (ERDF): *During February, ERDF pumped 490,158 liters (129,500 gallons) of leachate to the 200 Area Effluent Treatment Facility (ETF).*

Since ERDF operations began in July 1996, ERDF transportation has safely driven 7,706,589 kilometers (4,789,676 miles) without an at-fault vehicle accident. ERDF disposal has worked 1,717 days (since project inception) without a lost time accident.

During February, shipments totaling 37,640 metric tons (41,491 tons) of contaminated waste were transported to ERDF. 184,229 metric tons (203,079 tons) of waste have been received in FY01. To date, a total of 2,490,991 metric tons (2,745,862 tons) of material have been received and placed in the disposal facility.

100 B/C Area Remediation: *Excavation activities in support of the 100 B/C pipeline remediation were initiated on February 26 satisfying Tri-Party Agreement Milestone M-16-26D, "Begin Excavation Activities at 100 B/C Process Effluent Pipelines" (due February 28). Prior to excavation startup, temporary power hookup was completed and air monitors were started. A walkthrough was conducted with ERC management on February 22.*

Work continued on preparing baseline change proposals (BCPs) for sampling of the 100-B-12 filter box site and the 600-264 smudge pot oil drum site. The filter box site cleanup is being coordinated with the Surveillance/Maintenance and Transition (SM&T) Project. SM&T will remove the boxes, and the Remedial Action and Waste Disposal (RAWD) Project will perform verification sampling and site closeout. The 600-264 site will be sampled to determine if additional remediation is needed.

Green

100 D Area Remediation: *Backfill activities in the 100 D Area were completed on February 28 (five months ahead of milestone date) satisfying Tri-Party Agreement Milestone M-16-07B, "Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units" (due July 31).*

100 F Area Remediation: *Baseline volume excavations were completed for UPR-100-F-2 Basin Leak and the 116-F-2 Trench bypass ditches waste sites. Radiological surveying and sampling were completed to estimate the plume sizes. Excavation was completed for the pipeline leading to and from the 1607-F-2 septic waste tank. Excavation of the large plume from the 116-F-14 Retention Basin plume was initiated. Excavation and demolition of concrete structures (expansion boxes, foundations, anchor blocks) of the 100-F-19 pipelines progressed at the north Lewis Canal lateral.*

ERC Cultural Resource specialists and representatives from the Wannapum and Nez Perce tribes participated in archeological excavations at the north end of Lewis Canal. Eight 1 x 1 meter units were excavated. Cultural materials collected included fragments of bone, mussel shell, chert, petrified wood, and basalt; one projectile point, and a historic square nail. A fishing net weight was also found and turned over to ERC's Cultural Resources. Several organic samples were also collected for radiocarbon dating. Actions are required to identify and document cultural resources in areas prior to remediation.

ACCOMPLISHMENTS continued: *RAWD*

100 H Area Remediation: *The Tri-Party Agreement change request for Milestone M-16-26C, "Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in 100-HR-1" was approved by Ecology. The milestone date was revised from May 31 to September 30 to accommodate the schedule delays resulting from resolution of arsenic and chromium contamination issues.*

The lead brick survey at 100 H Area was completed. No contamination was found on the 2,595 bricks surveyed. Demobilization was completed, and the final report (due 30 days after completion of the work) is expected to be completed the last week of March. This effort supports the Supplemental Environmental Project resulting from the Multi-Media Inspection Settlement.

Laboratory testing for the 100 H Area hexavalent chromium leachate study was initiated. Preliminary results will be available in the next month.

Preparation activities were initiated in support of 100 H Area backfill operations that are scheduled to begin in early April.

100 K Area Remediation: *The scope for the upcoming 100 K Area remediation work was presented to the tribes at the monthly interface meeting. No concerns were expressed by the tribes.*

100 N Area Remediation: *Loading and hauling activities of 100 N Area containers to ERDF were curtailed during February while containers were decontaminated, inspected, and maintenance performed to ensure contamination control. During this time, the subcontractor conducted inspections and maintenance on the on-site container shuttle trucks, performed procedure reviews and container handling retraining, completed size reduction of all the crib girders, and performed potholing and trenching activities. Potholing and trenching activities identified plumes associated with the 116-N-3 trench and crib. A BCP is being prepared.*

Training and mockups were performed with the manufacturer of the diamond wire saw that will be used for cutting the 116-N-3 crib distribution trough. This resulted in changes to the means and methods for cutting and lifting of the trough sections, which will reduce worker exposure. Cutting the trough into sections will be complete in March prior to shipping. The Safety Analysis Report for Packaging (SARP) for shipping the trough is expected to be complete in early April, and trough removal will be complete by early May.

Site preparation was initiated for remediation work on the 116-N-3 bypass and pipelines. Work is scheduled to begin in March, as well as preparations for placement of the export water line support bridge.

Work continued on updating the 100-NR-1 integrated schedule for facility decontamination, decommissioning, and remediation activities. The updated integration schedule is expected to be completed in March.

100/300 Area Design/Assessment: *On February 7, a meeting was held with representatives from EPA, Ecology, RL, and ERC. The purpose of the meeting was to discuss expectations regarding the Tri-Party Agreement Milestone M-16-00F, "Establish Date for Completion of All 100 Area Remedial Actions" (due December 31).*

The authorization basis strategy for the 100 and 300 Area burial grounds was finalized and issued on February 9. The strategy outlines the path forward for the burial grounds currently under design. ERC's Nuclear Safety Engineering and RL's Authorization Basis Division staff were actively involved in the development of the strategy.

Green

ACCOMPLISHMENTS continued: *RAWD*

All 100 and 300 Area designs are on schedule. The 100 Area burial ground design is in Intermediate Design Phase. The Intermediate Design for 618-5 Burial Ground is currently in ERC review. The Remaining Sites design was completed in mid-February with the issuance of the design deliverables.

The Auditable Safety Analysis (ASA) for 618-5 Burial Ground, and the authorization basis strategy for 618-10 and 618-11, were initiated during the week of February 20. The approach for the ASA for 618-5 will follow the 618-4 burial ground pathway as 618-5 is considered analogous. The 618-10 and 618-11 authorization basis strategy will be to perform preliminary evaluations (e.g., preliminary material-at-risk inventory calculations) for future planning and scoping purposes only.

Pothole excavation activities were performed at two locations in the 300 Area for collection of uranium contaminated soil for the 300 Area Kd (partitioning coefficient) leachability study. Soil guzzler remediation equipment was used to conduct the excavation. The use of the soil guzzler for sample collection was considered a new use for this equipment, and will be documented as a technology deployment. No uranium contaminated soil was found (uranium activity was at background levels). In coordination with Fluor Hanford (FH), suspected uranium contaminated samples were successfully obtained near the 303 Building. These samples, along with the other samples collected earlier, will be provided to Pacific Northwest National Laboratory (PNNL) as soon as lab analyses identify the uranium activity level for the samples.

300 Area Remediation: *A BCP is being prepared to treat and dispose the 78 uranium oxide powder drums during this fiscal year that are currently staged in the 618-4 Burial Ground in the 300 Area. This workscope would be performed in lieu of initiating treatment of the uranium metal/oil drums this fiscal year. It is currently expected that the treatment technology for the uranium metal/oil contaminated drummed waste will not be available until next fiscal year.*

An analysis and recommended path forward of the issues associated with completing the 300-FF-1 Cleanup Verification Packages (CVPs) are being prepared.

300/600 Area Remediation. *Excavation and sorting of soil and debris at the 600-23 waste site were completed except for two small areas pending results of analysis. A plan is being established to sample the drums that were unearthed at 600-23. Upon completion of the loadout at the J.A. Jones site, the scales will be demobilized and moved to 600-23 followed by initiation of loadout operations at that waste site.*

A combination of ground-penetrating radar (GPR) data, depth of required excavation, and radiological status of purposed buried equipment in the south wall of Pit 11 suggest that remediation not be pursued. The Environmental Protection Agency (EPA) tentatively concurs pending results of drum analysis at the 600-23 waste site.

Green

SAFETY/ISMS/CONDUCT OF OPERATIONS: *RAWD*

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: *RAWD*

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: *RAWD*

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): *RAWD*

- ***DOE Secretarial:***

None identified at this time.

- ***DOE EM Performance Agreement:***

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: *RAWD*

- ***TPA Milestones:***

Milestone	Description	Due Date	(F) / (A) Date
M-16-26D	*Begin Excavation Activities at 100 B/C Process Effluent Pipelines.*	*2/28/01*	*2/26/01 (A)*
M-16-07B	*Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units as defined in Remedial Design Report/Remedial Action Work Plan for the 100 Area*	*7/31/01*	*2/28/01 (A)*
M-16-41A	*Complete Remedial Action Excavation for JA Jones 1 and 600-23 Waste Sites*	*7/31/01*	*5/23/01 (F)*
M-16-26C	*Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in the 100-HR-1 Operable Unit as defined in the Remedial Design Report/Remedial Action Work Plan for the 100 Area*	*9/30/01*	*8/27/01 (F)*
M-16-03E	*Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 618-4 Burial Ground), to include Excavation, Verification, and Backfilling*	*9/30/01*	*9/30/02 (F)**
M-16-26G	*Remove filter boxes and complete verification sampling for 100-B-12 waste site*	*9/30/01*	*9/30/01 (F)*
M-16-00F	*Establish Date for Completion of all 100 Area Remedial Actions*	*12/31/01*	*12/31/01 (F)*
M-16-41B	*Submit Cleanup Verification Package (CVP) for JA Jones 1 and 600-23 Waste Sites for EPA Approval*	*3/31/02*	*3/31/02 (F)*
M-16-26B	*Complete Remediation and Backfill of 51 Liquid Waste Sites in the 100-BC-1/-2, 100-DR-1/-2, and 100-HR-1 OUs and Process Effluent Pipelines in the 100-DR-1/-2, and 100-HR-1 OUs. Complete revegetation of 36 Liquid Waste Sites in the 100-BC-1, 100-DR-1/-2, and 100-HR-1 OUs as defined in the RDR/RAWP for the 100 Area.*	*3/31/02*	*3/31/02 (F)*

Green

**Per regulator request, Kd (partitioning coefficient) study is being performed to determine uranium leachability in the 300 Area. 300-FF-1 backfill will be deferred until leachability concerns are resolved. A TPA change package will be prepared in May timeframe. Regulators concur with path forward.*

- ***DNFSB Commitment:***

None identified at this time.

PERFORMANCE OBJECTIVES: *RAWD*

PI	% FY01 Fee Pool Less 10% for Comprehensive	PI Allocation of Fee	Task	Status
RAWD	*70%*	*80%* *10%* ***10%***	• *490,000 Tons by 9/30/01* • *Backfill 16 Sites by 9/30/01* • *50,000 Additional Tons by 9/30/01* ***(*Stretch)*** *CV <5.0%; SV <7.5% for grouped PBS ER01, ER03, ER04*	*On schedule.* *On schedule.* *100% of Stretch undertaken as of 2/28/01.* *(*Detail Section 6C)*

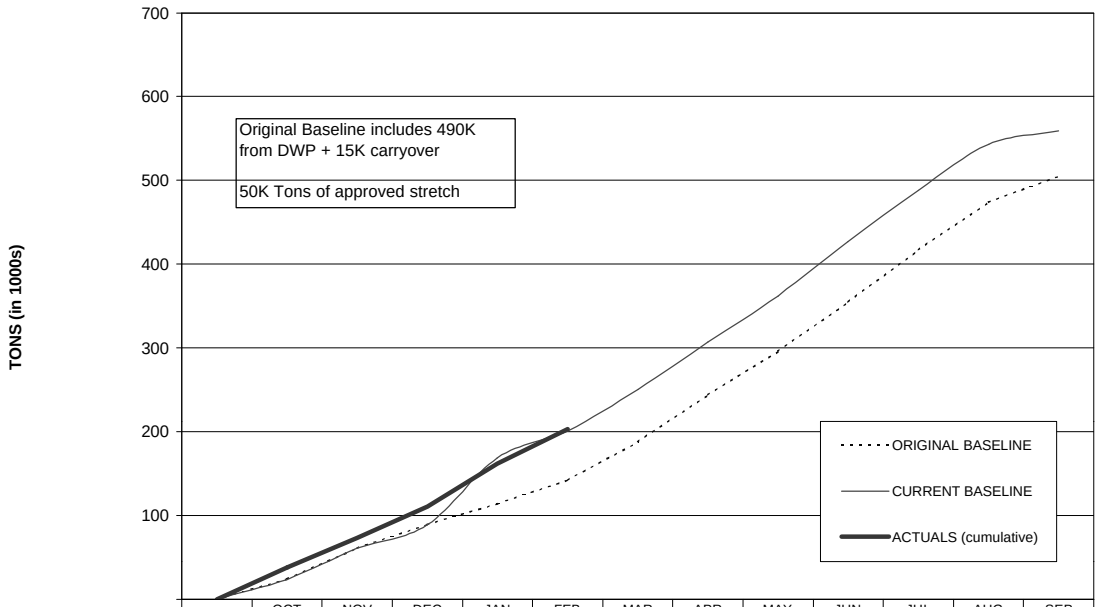
Green

PERFORMANCE MEASURES/METRICS: *RAWD – (River and Plateau)*

	DWP FY01	FY01Mgmt Commitments	Current Baseline (Incl. Baseline Changes)	Forecast For FY01	Completed YTD
Waste Sites Excavated	*12*	*12*	*20*	*20*	*5*

Green

Remedial Action and Waste Disposal Project
Cumulative Tons to ERDF



		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
ORIGINAL BASELINE		24	61	89	114	142	188	244	296	355	417	474	505
CURRENT BASELINE		24	61	89	169	201	250	307	362	427	488	543	559
ACTUALS (cumulative)		38	73	111	162	203							

MONTH

STRETCH AND SUPERSTRETCH GOALS: *RAWD*

FY01 RAWD "Stretch" Goals	Approved Tons (K)
Remediate Additional 50K Tons of Contaminated Soil by 9/30/01	
(1) Additional Contamination Soil at 100-F Pipelines (BCP 21013 approved 11/00)	*8.0K*
(2) Additional Contamination Material at 100-H Sites (BCP 21014 approved 11/00)	*7.5K*
(3) (Additional Contamination Material at 100-F Sites of 36.4 approved in February) (BCP 21043 approved 2/01)	*34.5K*
S/Total Remedial Action Stretch Goals:	***50.0K***

Green

*(*through February 28)*

PROJECT STATUS (COST/SCHEDULE): *RAWD*

- ***Schedule:***

Remedial Action & Waste Disposal Project	BCWS	BCWP	Variance
	$K	$K	$K
ER01 100 Area Remedial Actions	*11,435*	*11,735*	*300*
ER03 300 Area Remedial Actions	*1,053*	*798*	*(255)*
ER04 ER Waste Disposal	*7,120*	*7,332*	*212*
TOTAL Remedial Actions	***19,608***	***19,865***	***257***

Green

PBS-ER01 – 100 Area Remedial Action
Schedule Variance = ***$300K; 2.6%*** *[Last Month: ($80K); (0.9%)]*

Cause: *Backfill activities at 100-DR-1 and remedial actions at 100-IU-6 are proceeding ahead of schedule.*

Resolution: *None; activities may complete ahead of schedule.*

Cause: *Slower progress than planned on the 116-N-3 Crib demolition at the 100-NR-1 site due to higher radiation contamination levels, and demolition conditions.*

Resolution: *Other work is being accelerated and performed while the crib trough contamination and removal issues are resolved.*

PBS-ER03 – 300 Area Remedial Action
Schedule Variance = ***($255K); (24.2%)*** *[Last Month: ($299K); (30.4%)]*

Cause: *Delays in 300-FF-1 remediation contract closeout and North Process Pond well.*

Resolution: *Subcontractor closeout issues being addressed and well subcontract in place.*

Cause: *Delayed start of 300-FF-2 design data quality objective (DQO) to be combined with 100 Area Burial Ground design DQO for efficiency savings.*

Resolution: *None required; expect to recover by May by performing DQOs concurrently.*

PBS-ER04 – Environmental Restoration Waste Disposal
Schedule Variance = ***$212K; 3.0%*** *[Last Month: ($24K); (0.4%)]*

Cause: *Ahead of schedule; ERDF received nearly 1,600 tons more waste than planned due to additional remediation at soil sites.*

Resolution: *None required.*

PROJECT STATUS (COST/SCHEDULE) continued: *RAWD*

- ***Cost:***

Remedial Action & Waste Disposal Project	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER01 100 Area Remedial Actions	*28,801*	*11,735*	*10,084*	*1,651*
ER03 300 Area Remedial Actions	*2,711*	*798*	*760*	*38*
ER04 ER Waste Disposal	*18,056*	*7,332*	*6,636*	*696*
TOTAL Remedial Actions	***49,568***	***19,865***	***17,480***	***2,385***

Green

PBS-ER01 – 100 Area Remedial Action
Cost Variance = ***$1651K; 14.1%*** *[Last Month: $1539K; 17.0%]*

Cause: *Less labor was required due to sharing non-manual resources with the 100-BC work scope, shifting of personnel to other waste sites, less design and supervision required, and backfill completed six weeks early. Subcontract costs were decreased due to no longer needing additional subcontract.*

Resolution: *Reflected in EAC. Underrun will be used to perform additional remediation work.*

Cause: *CVPs are requiring less labor to prepare than planned due to the use of a "streamlined" format and the consolidation of waste sites. Labor costs have increased for the lead brick survey and have partially offset CVP savings.*

Resolution: *Reflected in EAC. Underrun will be used to perform additional remediation work.*

Cause: *The availability of extra disposal containers at 100-FR-1 is allowing more work (earned value) to be accomplished with the same work force.*

Resolution: *Reflected in EAC. Underrun will be used to perform additional remediation work.*

PBS-ER03 – 300 Area Remedial Action
Cost Variance = ***$38K; 4.8%*** *[Last Month: $62K; 9.1%]*

Cause: *Coordinating 300-FF-2 design efforts with 100 Area Burial Grounds resulted in savings.*

Resolution: *Reflected in EAC. Underrun will be used to perform additional remediation work.*

PBS-ER04 – Environmental Restoration Waste Disposal
Cost Variance = ***$696K; 9.5%*** *[Last Month: $483K; 8.4%]*

Cause: *Driver overtime has not been required as planned to stay on schedule.*

Resolution: *Driver overtime may be required during the summer months to meet demands.*

REGULATORY ISSUES: *RAWD*

Tri-Party Agreement Milestone M-16-03E: *M-16-03E, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling," due September 30, 2001, will be missed due to the EPA requirement for performing a Kd (partitioning coefficient) study on uranium leachability. The regrades will not be completed until study results confirm that no further excavations will be required.*

Green

Status: *The EPA requested that a Kd (partitioning coefficient) study be performed to address uranium mobility in the 300 Area. This study will consist of obtaining uranium-contaminated samples, and performing leach rates with follow-on absorption tests, resulting in a Kd value. A data quality objective (DQO) was completed, and a BCP was prepared to secure funding for the study. The study began in March and is expected to be completed in FY02. Preliminary results should be available at the end of FY01. A Tri-Party Agreement change package will be prepared in the May timeframe. The regulators concur with the proposed path forward.*

618-4 Burial Ground: *It is unlikely that treatment of the 618-4 Burial Ground uranium metal/oil drummed waste can be performed this fiscal year. The treatment technology has been identified, however, the treatment facility startup process is proceeding slower than planned. Currently, it appears that the treatment facility may be able to receive the uranium metal/oil drummed waste for treatment early next fiscal year. EPA has indicated a need to show continuous progress at 300-FF-1 in FY 2001.*

Green

Status: *In lieu of the above treatment this FY, a suggested alternative is to plan for and dispose of the 618-4 Burial Ground uranium oxide powder drums to ERDF. A BCP is being prepared for this scope of work.*

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): *RAWD*

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): *RAWD*

None identified at this time.

INTEGRATION ACTIVITIES: *RAWD*

None identified at this time.

Decommissioning Projects (D&D)

SECTION B – RESTORING THE RIVER CORRIDOR

**Financial / Performance Measures data as of month-end February.
All other data as of March 22, 2001 (unless otherwise noted).**

Decommissioning Projects (D&D)

ACCOMPLISHMENTS: *D&D*

F and DR Reactor Interim Safe Storage (ISS): *During February, the initial Laser-Assisted Ranging and Data System (LARADS) survey was completed for the lower fill material in the F Reactor fuel storage basin (FSB). LARADS is a data logging system used to remotely locate and record radiation readings. The survey results showed only one area with higher dose rates than the rest of the basin, and a few areas of slightly elevated dose rates. Engineering is revising the dose rate modeling calculations using these new measurements to determine the likely dose at the bottom of the remaining fill material. Mapping of the F Reactor FSB was also completed using the In Situ Object Counting System (ISOCS) and gamma camera. Preliminary data is inconclusive as to whether any fuel remains in the FSB. LARADS mapping will continue into March. During February, all remaining DR Reactor concrete pourbacks were completed.*

D Reactor ISS: *At D Reactor, piping asbestos insulation was removed from the exhaust plenum and south reactor areas. Asbestos abatement was also completed in the FSB and transfer bay areas. Liquid pipe checks were completed in the valve pit, supply fan, exhaust plenum, and south reactor areas. During early February, demolition and loadout activities were started in the miscellaneous storage, lunchroom, and valve pit areas.*

H Reactor ISS: *At H Reactor, asbestos abatement was completed in the FSB, and lead removal was completed in the electrical equipment area. Sampling activities were also completed for the first waste designation sampling and isotopic sampling. On February 13, the H Reactor FSB dewatering system design and residual water absorption memorandums were completed. The dewatering system design will be the same as what was installed in the F Reactor FSB.*

233-S Plutonium Concentration Facility Decommissioning Project: *During February, activities accomplished in the highly contaminated 233-S facility included the following:*

- *Removal of the L-18 vessel on February 23, eleven days ahead of schedule. This is the first of 15 vessels that are planned for removal by June 2002.*
- *Installation of removable grating over the south ladder openings in viewing rooms 3 and 4. This work supports removal of piping and hangers during L-1 vessel removal.*
- *Submitted redline copy of the 233-S Authorization Basis revision to RL for review.*
- *Installation of fire detectors in the east and south weather enclosures.*
- *Continuation of process hood channel iron removal.*
- *Completion of an Unreviewed Safety Question (USQ) screening for the relocation of the first, second, and third floor viewing room smoke detectors.*
- *Receipt of the final process vessel nondestructive assay (NDA) report indicating substantially lower inventory estimates than were calculated during the 1995 assay.*

Green

SAFETY / ISMS / CONDUCT OF OPERATIONS: *D&D*

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: *D&D*

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: *D&D*

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): *D&D*

- ***DOE Secretarial:***

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: *D&D*

- ***DOE EM Performance Agreement:***

None identified at this time.

- ***TPA Milestones:***

Milestone	Description	Due Date	(F) / (A) Date
M-93-12	*Issue 105-DR Disposition Competitive Procurement Package for Ascertaining the Most Effective and Efficient Approach to FEIS ROD Selected Alternative Implementation (....)*	*2/28/02*	**TBD*

Green

**Regulators have agreed to renegotiate this milestone since DR Reactor ISS is scheduled for completion in FY02. Initial discussions are underway.*

- ***DNFSB Commitment:***

None identified at this time.

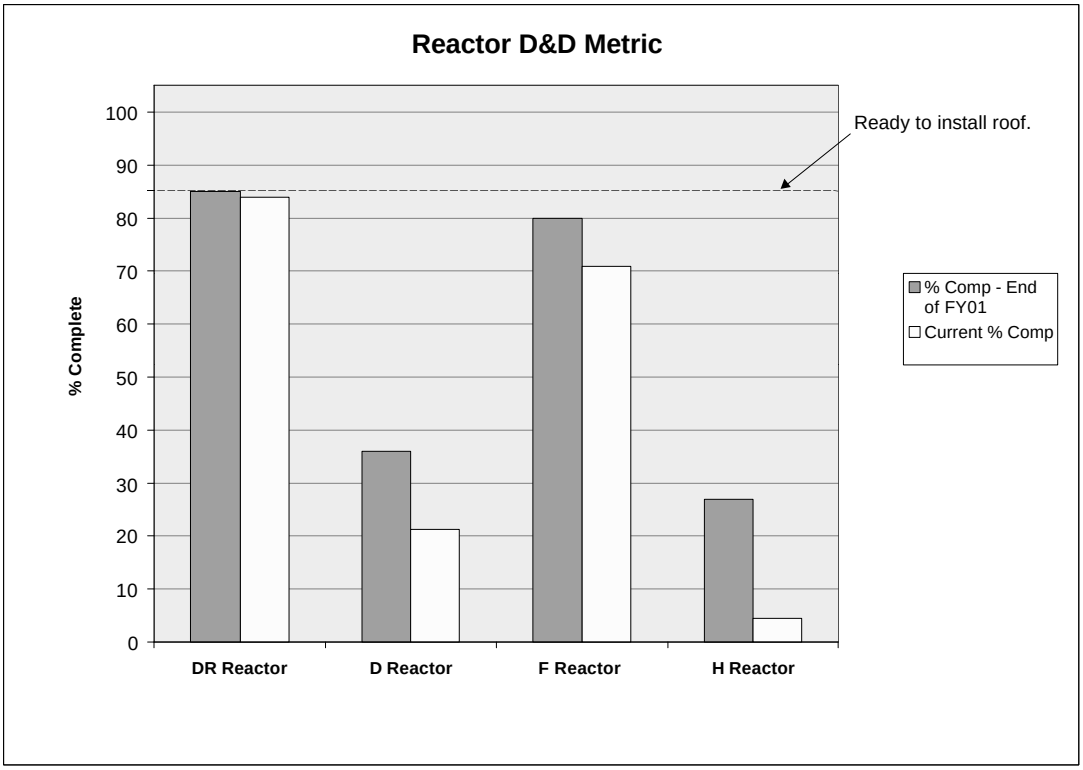
PERFORMANCE OBJECTIVES: *D&D*

PI	% FY01 Fee Pool Less 10% for Comprehensive	PI Allocation of Fee	Task	Status
233-S	*13% plus FY02 equivalent portion*	*76%* ***24%***	• *8 vessels by 6/30/02* • *7 additional vessels by 6/30/02* ***(*Stretch)*** *CV <5.0%; SV <7.5% for PBS ER-06*	*Critical path activity on schedule.* *BCP-21023 approved. Stretch activities in progress and on schedule.* *(*Detail Section 6C)*
ISS	*11%*	*35%* *15%* *35%* *15%*	• *D Reactor Major Tasks by 9/30/01* • *DR Reactor Major Tasks by 9/30/01* • *F Reactor Major Tasks by 9/30/01* • *H Reactor Major Tasks by 9/30/01* *CV <5.0%; SV <7.5% for PBS ER-06*	*Critical path activities on schedule; received authorization funding in December.*

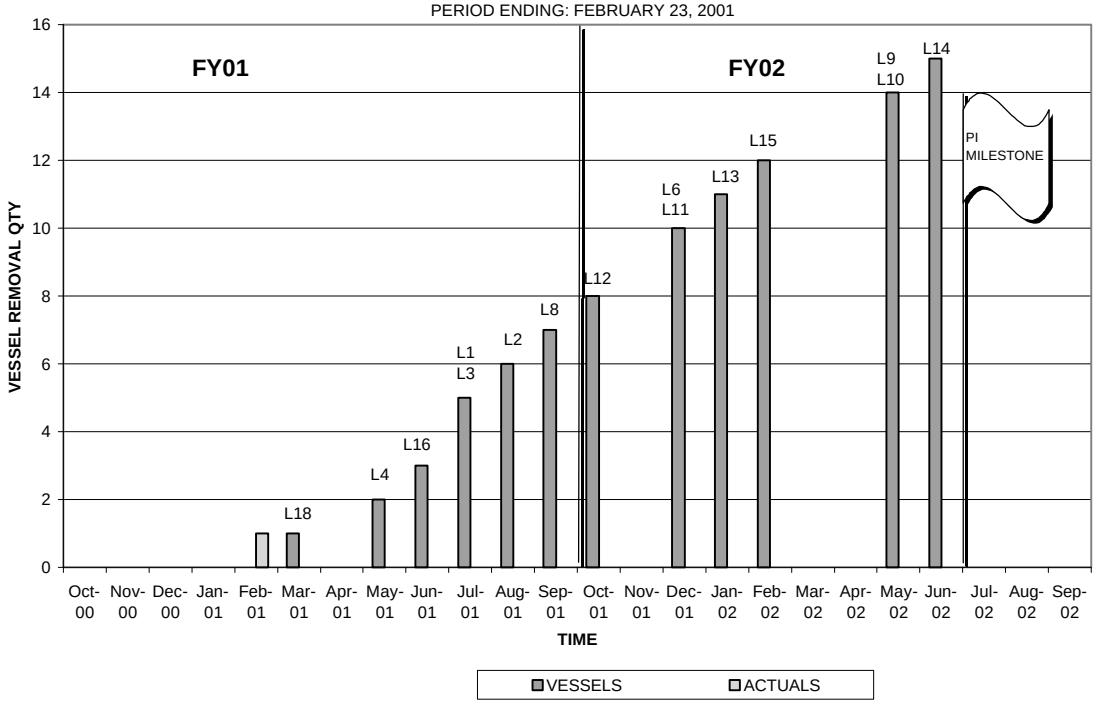
Green

PERFORMANCE MEASURES / METRICS: *D&D*

Green



ACCELERATED VESSEL REMOVAL SCHEDULE



STRETCH AND SUPERSTRETCH GOALS: *D&D*

FY01 D&D "Stretch" Goals	Approved BCPs (K)
Remove 7 Additional Vessels by 6/30/02 for a total of 15 Vessels (Stretch Only) (BCP 21023 approved 11/00)	*$1,072.0K*
S/Total D&D Stretch Goals:	***$1,072.0K***

Green

PROJECT STATUS (COST/SCHEDULE): *D&D*

- ***Schedule:***

Decommissioning Projects	BCWS	BCWP	Variance
	$K	$K	$K
ER06 ISS and Other D&D Projects	*5,038*	*4,894*	*(144)*
ER06 233-S	*2,479*	*2,339*	*(140)*
TOTAL D&D	***7,517***	***7,233***	***(284)***

Green

PBS-ER06 – Decontamination and Decommissioning

Schedule Variance = ***($284K); (3.8%)*** *[Last Month: ($474K); (8.1%)]*

Cause: *The Brokk equipment delivery date was understated in the baseline.*

Resolution: *No milestone impact. Development of training procedures has been accelerated to help recover the extended delivery schedule.*

Cause: *Structure demolition at D Reactor ISS and hazardous material removal at H Reactor ISS is taking less time than planned.*

Resolution: *In order to keep crews fully effective, additional work scope such as removing material in the Safe Storage Enclosure (SSE) area may need to be accelerated from FY02 into FY01; the cost impact remains to be evaluated.*

Cause: *Process hood vessel removal at the 233-S facility behind schedule due to difficulty in removing neutron monitors, stringent procedures have slowed TRU waste shipments, and non-destructive assay (NDA) labor support not available.*

Resolution: *Schedule variance has been reduced (approximately 3% from prior month) due to completing vessel removal ahead of schedule; selective overtime will continue to be used to recover schedule.*

PROJECT STATUS (COST/SCHEDULE) continued: *D&D*

- ***Cost:***

Decommissioning Projects	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER06 ISS and Other D&D Projects	*11,993*	*4,894*	*4,272*	*622*
ER06 233-S	*6,485*	*2,339*	*2,618*	*(279)*
TOTAL D&D	***18,478***	***7,233***	***6,890***	***343***

Green

PBS-ER06 – Decontamination and Decommissioning

Cost Variance = ***$343K; 4.7%*** *[Last Month: ($47K); (0.9%)]*

Cause: *Less effort than planned on DR and H Reactors ISS mobilization/demobilization, sampling and analysis, asbestos removal, hazardous material removal, and demolition.*

Resolution: *Underrun will be used to perform additional remediation/demolition work.*

Cause: *Overrun at the 233-S Facility due to purchase of additional tools needed for process hood pipe and vessel removal.*

Resolution: *Will be reflected in EAC.*

REGULATORY ISSUES: *D&D*

D and H Reactor Impacts of TPA Milestones: *The acceleration of the reactor ISS projects is no longer consistent with the current M-93 milestones, especially the competitive procurement and renegotiating milestone (M-93-12) for DR Reactor.*

Green

Status: *Initial discussions with the regulators have begun. This will need to be discussed as part of RL's 100 Area acceleration vision. Regulators concur with path forward.*

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): *D&D*

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): *D&D*

F Reactor FSB Fuel Transfer Plan: *The FH / K Basin management has not yet approved the F Reactor FSB Fuel Transfer Plan. The Plan outlines how the interfaces outlined in the DOE Letter of Direction (LOD) will be implemented between BHI and FH. The latest version of this plan was sent 1/10/01 (which incorporated the 12/21/00 LOD revision), but the FH / K Basin group has had earlier versions since October 2000.*

Green

Status: *Reactor ISS Project is working to implement the plan as written based on the verbal acknowledgement from the involved FH technical staff.*

233-S Process Hood: *Non-destructive assay (NDA) support (provided by FH-PFP) continues to be a concern. The level of NDA services requested in the FY 2001 Letter of Instruction (LOI) is not being met.*

Yellow

Status: *A meeting was held with the Manager of PFP to discuss the current support level. NDA support requirements at PFP have increased in addition to the increased need at 233-S. He stated that the level of NDA services in the FY 2001 LOI could only be met on a not to interfere with PFP basis. Additional NDA services are being arranged under PFP's umbrella contract with a vendor (Canberra). It is BHI's intention to establish vendor NDA services (also with Canberra) under a stand alone purchase order as soon as they have taken over responsibility for 233-S NDA support from PFP.*

INTEGRATION ACTIVITIES: *D&D*

FH Safeguards and Security issued a letter to ERC that outlined the security measures that must be taken by ERC in the event fuel is found in the FSB.

Green

Program Management and Support (PM&S)

SECTION B – RESTORING THE RIVER CORRIDOR

**Financial / Performance Measures data as of month-end February.
All other data as of March 22, 2001 (unless otherwise noted).**

Program Management & Support (PM&S)

ACCOMPLISHMENTS: *PM&S*

COMPLIANCE, QUALITY, SAFETY, AND HEALTH:

Safety and Health: *ERC RadCon Compliance and Support personnel provided data to support responses to Defense Nuclear Facilities Safety Board (DNFSB) questions. The questions focused on the radiological work planning for F Reactor FSB activities and the ERC internal dosimetry program.*

As a result of a respirator equipment failure, ERC Safety and Health personnel met with 233-S facility personnel to develop an alternative of using an additional slip buckle to secure the main belt buckle on Powered Air Purifying Respirator (PAPR) belts. This alternative was approved by the manufacturer and is also being evaluated by the 233-S Project. The polyvinyl chloride (PVC) belt did not appear to be a suitable alternative.

Radiological surveys supporting the release of two water trucks for eventual sale to the public were completed. A final radiological report is due in March which will allow the vehicles to be released for reuse.

PROGRAM AND PROJECT SUPPORT:

External Affairs: *Support was provided to the Hanford Advisory Board (HAB) ER Committee Chair and Idaho National Engineering and Environmental Laboratory (INEEL) to prepare for the DOE complex-wide Vadose Zone Science and Technology Road Map Roundtable to be held in Richland on April 9. A registration flyer was developed and distributed at the Site Specific Advisory Board Meeting on February 7-9 in Las Vegas. A roundtable will also be held at the Savannah River Site on March 28.*

On February 15, the president of BHI presented a $13,000 contribution to the Richland Seniors Association. The contribution helped the Association to meet its commitment to the City of Richland to raise $100,000 for the new Richland Community Center.

ENGINEERING AND TECHNOLOGY:

Environmental Technologies: *Approximately 900 sagebrush tublings were planted on the bioremediated site on the North Slope. The tublings will enhance the 1997 initial native grass and forbs site revegetation. The revegetation activities are part of the ERC's ongoing efforts to mitigate habitat damaged from past Hanford operations.*

ERC's nomination of the Small Diameter Geophysical Logging System in the "Return on Investment" category of the DOE National Pollution Prevention Award Program was selected as a winning entry. A second nomination for the successful implementation of Value Methodology in waste minimization was chosen as runner-up in the "Waste/Pollution Prevention" category.

Green

ACCOMPLISHMENTS continued: *PM&S*

A comprehensive review of ERC's Environmental Protection Program was completed. The review consisted of reviewing environmental policies, roles and responsibilities; ERC procedures and plans; field implementation; and field support interfaces. Assessment team members included Environmental Technologies, Field Support, and Safety and Health. Results of the assessment included four observations and four comments, which will require changes to ERC procedures to improve procedures and address Integrated Environment, Safety, and Health Management System (ISMS) continuous improvement commitments. Overall, the environmental program has improved significantly, and systems are in place to ensure environmental protection and compliance.

A software package for sample data tracking (SDT) was developed to allow installation of SDT at remote work locations without traveling to the field. The software package was tested at 100 N Area. Use of the software will reduce travel time to field locations for Automation Technology personnel to support environmental information system activities.

Technology Applications: *The Ultrasonic Liquid Level Detection System was deployed at the Reactor ISS Project. This technology was originally deployed for the Canyon Disposition Initiative (CDI) Project.*

Green

PLANNING AND CONTROLS:

The Long Range Plan (LRP) graphical wall charts were distributed during February. The LRP contains both the current (FY01) and new (FY02) work breakdown structures.

SAFETY / ISMS / CONDUCT OF OPERATIONS: *PM&S*

See Executive Summary.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVMENT: *PM&S*

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: *PM&S*

Green

Six Sigma:

The Waste Management Process Improvement Project (PIP#1) is entering the "Control phase" and is about 85% complete. The business plan for this PIP includes the following elements:

- *problem statement*
- *project objectives*
- *primary and secondary metrics*
- *pareto graphs*
- *swim lane process flow charts*
- *failure method effect analysis*
- *multi-variable analyses*
- *improvement(s) pilot test(s)*
- *improvement(s) implementation plan*

The Procedure Development Process Improvement Project (PIP#2) has begun the "Measure phase" and is about 25% complete. The business plan for this PIP includes the following elements:

- *problem statement*
- *project objectives*
- *primary and secondary metrics*
- *pareto graphs*
- *swim lane process flow charts*

The first week of March, 21 ERC and 2 DOE-RL personnel participated in Six Sigma Yellow Belt Training. Yellow Belts fulfill the role of process owners and operators, as well as that of key members of PIP Teams. They work in partnership with the Champion and Black Belts to ensure that the improvement efforts are focused and executed in those areas where data indicates the need.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): *PM&S*

- ***DOE Secretarial:***

None identified at this time.

- ***DOE EM Performance Agreement:***

None identified at this time.

- ***TPA Milestones:***

None identified at this time.

- ***DNFSB Commitment:***

None identified at this time.

PERFORMANCE OBJECTIVES: *PM&S*

Comprehensive Measures–Approximately 10% Available Fee Pool Total Positive Value
Total Negative Value cannot exceed earnings under the Comprehensive PI

Comprehensive Measure	Fee Allocation	Task	Status
Safety	*Negative Fee up to 50% of fee available for comprehensive PI*	• *The Contractor shall protect worker safety and health, public safety and health, and the environment.*	*Reference the Safety Section of the Cross-Cutting package.*
Operational Excellence	*Positive Fee up to 55% of fee available for comprehensive PI*	• *Migrate systems to facilitate PBS restructuring in FY02 – 15%* • *Rebaseline completed per Baseline Updating Guidance (BUG) – 20%* • *Integrate technology into Projects – 10%* • *Achieve pollution prevention/waste minimization – 10%*	*Rebaseline activities completed on 1/10/01. All other activities on schedule for completion as planned.*
Effective Leadership	*Positive Fee up to 45% and Negative Fee up to 50% of fee available for comprehensive PI*	• *Management Effectiveness* • *Customer Satisfaction* • *Effective Financial Management*	*AMEW transmitted a letter expressing concerns regarding contractor oversight at the 100 N Remediation Project. BHI responded with a follow-up letter outlining corrective actions, which are being implemented per the schedule identified. No other concerns were identified.*

Green

PERFORMANCE MEASURES/METRICS: *PM&S*

ERC identified five technologies to be deployed during FY01. Through February, four technologies have been deployed.

Technology Deployment	PBS	Planned Date	(F)/(A) Date
Remote Retrieval System (Brokk 330N™ with appropriate attachments)	*RL-ER06*	*2nd quarter*	*3/01 (F)**
3D Visual and Gamma Imaging System (GammaCam)	*RL-ER06*	*2nd quarter*	*2/01 (A)*
In Situ Object Counting System (ISOCS)	*RL-ER06*	*2nd quarter*	*2/01 (A)*
Polyshield SS-100 Fixative	*RL-ER01*	*12/00*	*12/00 (A)*
Surveillance and Measurement Model 935	*RL-ER01*	*2nd quarter*	*5/01 (F)*
Ultrasonic Liquid Level Detection	*RL-ER06*	*2nd quarter*	*2/01 (A)*

Green

**Brokk on site and currently going through acceptance testing. Operator training will begin in late March, with deployment scheduled for mid April.*

STRETCH AND SUPERSTRETCH GOALS: *PM&S*

None identified at this time.

PROJECT STATUS (COST/SCHEDULE): *RAWD*

- ***Schedule:***

Program Management & Support	BCWS	BCWP	Variance
	$K	$K	$K
ER10 ERC Program Management & Support	*12,025*	*11,847*	*(178)*
ER10 RL Program Management & Support	*2,288*	*1,194*	*(1,094)*
TOTAL PM&S	***14,313***	***13,041***	***(1,272)***

Green

PBS-ER10 – Program Management and Support

Schedule Variance = ***($1,272K); (8.9%)*** *[Last Month: ($962K); (8.3%)]*

Cause: *HEIS/HGIS/WIDS and project specific databases staffs are working on higher priority direct project scope.*

Resolution: *Temporary schedule delay; subcontractor and temporary labor on board, and new hire requisition being processed.*

Cause: *Late billing on site-wide assessments.*

Resolution: *RL is discussing billing/timing with other site contractors/government agencies.*

PROJECT STATUS (COST/SCHEDULE) continued: *PM&S*

- ***Cost:***

Program Management & Support	FY01 EAC	BCWP	AWP	Variance
		$K	$K	$K
ER10 ERC Program Management & Support	*31,478*	*11,847*	*11,385*	*462*
ER10 RL Program Management & Support	*6,381*	*1,194*	*1,194*	*0*
TOTAL PM&S	***37,859***	***13,041***	***12,579***	***462***

Green

PBS-ER10 – Program Management and Support
Cost Variance = ***$462K; 3.5%*** *[Last Month: $988K; 9.2%]*

Cause: *Direct charge material purchase was transferred to a distributable account.*

Resolution: *Underrun has been trended; and a BCP is in process to transfer budget.*

REGULATORY ISSUES: *PM&S*

None identified at this time.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): *PM&S*

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): *PM&S*

None identified at this time.

INTEGRATION ACTIVITIES: *PM&S*

Environmental Technologies:

ERC worked with FH to establish a recycling credit for the Hanford Site's sanitary waste stream. The sanitary waste is hauled to the Roosevelt landfill where it is used to generate electricity from the methane gas produced. A 70% recycling credit was given for the Site's sanitary waste. This recycling effort will exceed the Secretary of Energy's goal to reduce sanitary waste by 50% before 2006.

Planning and Controls:

Several planning meetings and reviews were attended and supported during February. On February 7, a review of the Site Strategic Plan Master Logic for the GW/VZ Projects was chaired by FH. ERC provided updates to the Plan, which was prepared by PNNL, to reflect the recent ER Baseline Update. On February 13, the Central Plateau planning meeting was chaired by RL and was supported by FH, PNNL and ERC. These meetings were held in preparation for the Hanford Advisory Board (HAB) meeting held on March 6.

ERC continued ongoing coordination activities with RL, PNNL, and FH to develop a Hanford Cleanup Summary Schedule. This schedule is to display key areas of River Corridor, Central Plateau, and Office of River Protection workscope for FY02 through FY46.

Several fields within the Integrated Priority List (IPL) database (which is maintained by FH) were updated with data from the recent ER Baseline Update in support of Hanford Site IPL activities.

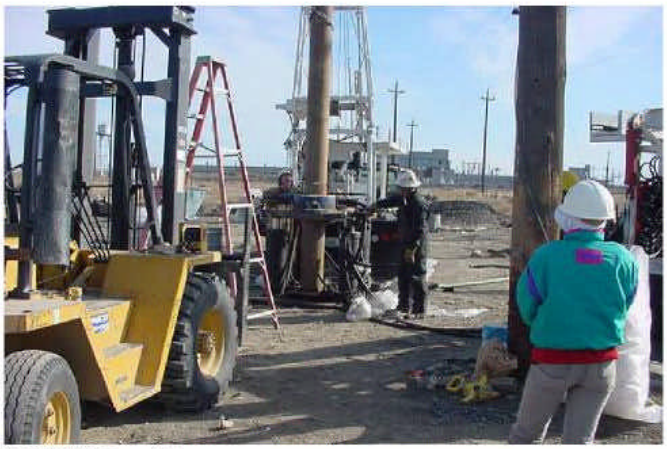
Green

Environmental Management Performance Report

April 2001

Section C - Central Plateau Information

- **Groundwater/Vadose Zone Integration Project**
- **Surveillance/Maintenance & Transition Projects**



ISRM Well Completion

Sampling from Manway at Hexone Tank 141

276-S Manway Removal

Monitoring for Hexone Vapors during Glove Box Installation at 276-S

Focused on Progress...
Focused on Outcomes!

Financial/Performance Measures data as of month-end February.
All other data as of March 22 (unless otherwise noted).

Department of Energy
Richland Operations Office

Bechtel Hanford, Inc.
Environmental Restoration Contractor

E0103132.2

Groundwater/Vadose Zone Integration Project (GW/VZ)

SECTION C – TRANSITIONING THE CENTRAL PLATEAU

**Financial / Performance Measures data as of month-end February.
All other data as of March 22, 2001 (unless otherwise noted).**

Groundwater/Vadose Zone Integration Project(GW/VZ):

ACCOMPLISHMENTS: *GW/VZ*

GW/VZ INTEGRATION PROJECT:

System Assessment Capability: *The Integration Project completed input files for overall history matching. Completion of these files was the last major activity that needed to be done prior to running the System Assessment Capability (SAC) model as an integrated capability.*

Science and Technology: *Lawrence Livermore National Laboratory and Pacific Northwest National Laboratory (PNNL) completed nonisothermal simulations of the S-SX tank farm that will be used in the field investigation report. The field investigation report supports decisions regarding interim corrective actions for the S-SX tank farm.*

GROUNDWATER MANAGEMENT:

In Situ Redox Manipulation (ISRM) Project: *In February, agreement was reached on the path forward for the drilling approach to install ISRM Phase II barrier wells west of the existing barrier.*

Long-Term Groundwater Monitoring: *The annual report on Hanford Site Groundwater Monitoring for Fiscal Year 2000 was transmitted to RL on February 28 as planned. The report was also posted on the Groundwater Monitoring Project's website.*

All data from the February 28 earthquake was transmitted to RL's Site Emergency Services personnel and to facility structural engineers to help evaluate any potential damage to buildings.

River Corridor Well Decommissioning: *PNNL completed the analysis of the 115 wells available for decommissioning in River Corridor Phase 1A and 1B. This well decommissioning is in support of the super stretch performance incentive to decommission 90 wells.*

Resource Conservation and Recovery Act (RCRA) Well Installation: *Installation of five RCRA wells remains on schedule for completion by the end of April, in order to satisfy Tri-Party Agreement Milestones M-24-49 and M-24-50. The third of the five RCRA wells was installed in February.*

Summary of Five Pump and Treat Systems: *All groundwater pump and treat systems operated above the planned 90% availability levels in February. Since system inception, the five pump and treat systems have processed over 4.8 billion liters of groundwater, removing approximately 5,131 kilograms of carbon tetrachloride, 227 kilograms of chromium, and 0.97 curies of strontium. Approximately 495 million liters of groundwater have been processed in FY01, removing approximately 549 kilograms of carbon tetrachloride, 33 kilograms of chromium, and 0.082 curies of strontium.*

Green

SAFETY / ISMS / CONDUCT OF OPERATIONS: *GW/VZ*

See Executive Summary.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT: *GW/VZ*

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: *GW/VZ*

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): *GW/VZ*

- ***DOE Secretarial:***

None identified at this time.

- ***DOE EM Performance Agreement:***

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: *GW/VZ*

- ***TPA Milestones:***

Milestone	Description	Due Date	(F) / (A) Date	
M-13-00K	*Submit One 200 NPL RI/FS (RFI/CMS) Work Plan*	*12/31/00*	*12/21/00 (A)*	
M-13-25	*Submit Uranium Rich Process Waste Group (200-PW-2) Work Plan*	*12/31/00*	*12/21/00 (A)*	
M-24-46	*Install Three Additional Wells at SST WMA S-SX*	*12/31/00*	*12/27/00 (A)*	
M-24-47	*Install Four Additional Wells at SST WMA T*	*12/31/00*	*12/27/00 (A)*	
M-24-48	*Install Three Additional Wells at SST WMA TX-TY*	*12/31/00*	*12/27/00 (A)*	
M-24-00L	*Install RCRA Groundwater Monitoring Wells at the Rate of up to 50 in Calendar Year 2000 if Required*	*12/31/00*	*12/27/00 (A)*	
M-16-27A	*Complete 100-HR-3 Phase I, ISRM Barrier Emplacement*	*12/31/00*	*11/01/00 (A)*	Green
M-24-49	*Install Three Additional Wells at SST WMA S-SX*	*4/30/01*	*3/30/01 (F)*	
M-24-50	*Install Two Additional Well at SST WMA TX-TY*	*4/30/01*	*3/18/01 (A)*	
M-13-26	*Submit Plutonium/Organic-Rich (200-PW-1) Work Plan*	*6/30/01*	*6/30/01 (F)**	
M-15-38A	*Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Feasibility Study and 216-B-3 Pond System RCRA TSD Unit Closure Plan and Submit Draft A Gable Mountain Pond/ B Pond and Ditch Cooling Waste Group Proposed Plan/Proposed RCRA Permit Modification*	*11/30/01*	*11/30/01 (F)***	
M-13-00L	*Submit Three 200 NPL RI/FS (RFC/CMS) Work Plans*	*12/31/01*	*****	Yellow
M-16-27B	*Complete 100-HR-3 Phase II, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement)*	*12/31/01*	*12/31/01 (F)*	Green
M-24-00M	*Install RCRA Groundwater Monitoring Wells at Rate of up to 50 in Calendar Year 2001 if Required*	*12/31/01*	*12/31/01 (F)*	

**EPA stated their expectation is to have 200-PW-1 work plan incorporate all investigations needed to address carbon tet contamination in the vadose zone. This is a significant increase in scope for this work plan. A draft TPA change request was transmitted to the regulators on March 15. Options analysis is being performed, and discussions are being scheduled with the regulators to resolve the issue.*

***Regulators recommended feasibility study (FS) be placed on hold due to 1) adequacy of ecological data, 2) application of new Model Toxics Control Act (MTCA) requirements, and 3) land-use scenario development issues. A draft TPA change request will be prepared proposing milestone be revised. Regulators concur with path forward.*

****M-13 series milestones will require renegotiation to reflect the revised 200 Area strategy. This issue was discussed with the regulators at the last TPA Quarterly Review on December 19.*

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: *GW/VZ*

- ***DNFSB Commitment:***

None identified at this time.

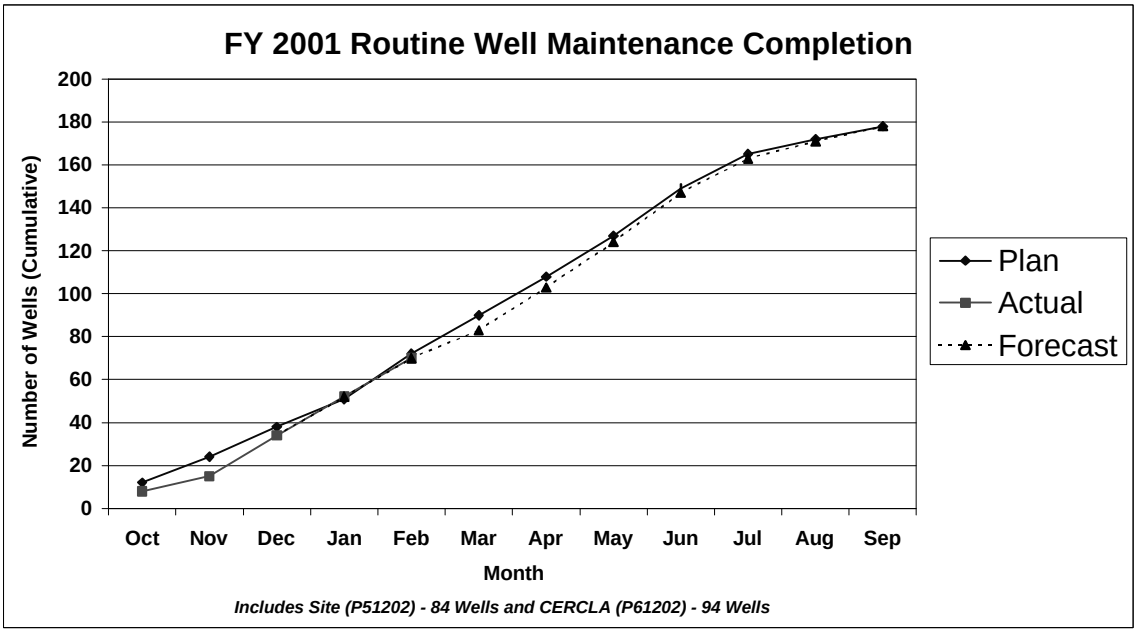
PERFORMANCE OBJECTIVES: *GW/VZ*

PI	% FY01 Fee Pool Less 10% for Comprehensive	PI Allocation of Fee	Task	Status
GW – ISRM Barrier	*3%*	*3%*	• *Drill 24 wells and inject sodium dithionite by 9/30/01* *CV <5.0%; SV <7.5% for BHI portion of ER-08*	*Critical path activities on schedule, however an emerging issue on effects of air drilling on the ISRM barrier is being evaluated. Waste issues will continue while Project pursues Ecology's "contained-in" approach.*
GW – 618-11 Tritium Plume	*3%*	***3%***	• *Drill wells to establish 20,000 pCi/L Contour, Collect Groundwater Samples by 9/30/01* ***(*Stretch)*** *CV <5.0%; SV <7.5% for BHI portion of ER-08*	*Work has commenced.* *(*Detail Section 6C)*

Green

PERFORMANCE MEASURES/METRICS: *GW/VZ*

Green



Includes Site (P51202) - 84 Wells and CERCLA (P61202) - 94 Wells

Cumulative	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Plan	12	24	38	51	72	90	108	127	149	165	172	178
Actual	8	15	34	52	70							
Forecast						83	103	124	147	163	171	178

Notes: Plan: Well Maintenance is planned on a quarterly basis and spread evenly by month for purposes of this graph.
Forecast: When wells are "released" to the subcontractor for maintenance, he is given 90 days for completion. That is also spread evenly by month, for that 90-day period, for this graph.

STRETCH AND SUPERSTRETCH GOALS: *GW/VZ*

FY01 GW/VZ "Stretch" Goals	Approved BCPs (K)
Tritium Plume at 618-11 Burial Ground – Collect GW Samples by 9/30/01 (BCP 21090 approved 1/01)	*$595.4K*
S/Total GW – Vadose Zone Stretch Goals:	***$595.4K***

Green

PROJECT STATUS (COST/SCHEDULE): *GW/VZ*

- ***Schedule:***

GW/VZ Integration Project	BCWS	BCWP	Variance
	$K	$K	$K
ER02 200 Area Remedial Actions	*889*	*711*	*(178)*
ER08 Groundwater Management	*10,865*	*10,121*	*(744)*
VZ01 Groundwater/Vadose Zone	*4,763*	*4,162*	*(601)*
TOTAL Groundwater	***16,517***	***14,994***	***(1,523)***

Green

PBS-ER02 – 200 Area Remedial Action (Assessment)
Schedule Variance = ***($178K); (20.0%)*** *[Last Month: ($125K); (17.3%)]*

Cause: *The CW-1 Feasibility Study (FS) and proposed plan (PP) have been deferred to address land use and ecological data requirements.*

Resolution: *A baseline change proposal (BCP) has been prepared to defer the FS and PP to FY02-04, so that ecological information can be obtained and included.*

Cause: *The removal of the irrigation system at BP-1 Hanford Barrier required more time to identify a candidate to purchase and remove the system.*

Resolution: *No impact on other work on the project; a candidate to purchase and remove the system has been identified.*

PBS-ER08 – Groundwater Management
Schedule Variance = ***($744K); (6.8%)*** *[Last Month: ($1077K); (12.1%)]*

Cause: *RCRA well drilling delayed due to contaminated soil encountered; waste shipments were placed on hold to pursue regulator recommended approach; sample collection also delayed.*

Resolution: *TPA milestones are not in jeopardy from this delay; schedule has been revised to show more aggressive plan.*

Cause: *Well decommissioning delays caused by extended well document search and selection.*

Resolution: *The project is updating documentation to accurately account for Hanford wells so decommissioning can continue.*

Cause: *Groundwater monitoring activities slowed due to shifting resources from annual report preparation to the 618-11 tritium investigations.*

Resolution: *A recovery schedule has been initiated. Anticipate recovery in next quarter.*

PROJECT STATUS (COST/SCHEDULE) continued: *GW/VZ*

PBS-VZ01 – Groundwater/Vadose Zone

Schedule Variance = ***($601K); (12.6%)*** *[Last Month: ($679K); (16.7%)]*

Cause: *Additional time required to solicit potential bidders and to implement DOE-directed guidance for virtual library software methodology.*

Resolution: *An attempt will be made to identify efficiencies in an effort to mitigate the schedule variance, but completion is projected to carry over to FY02. BHI has tailored new Software Engineering Methodology (SEM) requirements to documentation.*

Cause: *Conceptual Model Standardization activities experienced a delayed start due to the delay in obtaining a subcontractor. A BCP has been prepared to defer a portion of this work to FY02.*

Resolution: *Activities have started and are progressing; impact is minimal. Not critical path activity; key activities completed in early March.*

Cause: *Evaluation of FY00 test and development of FY01 Vadose Transport Test Plan, and start of Groundwater/River interface study did not start as scheduled due to high priority work.*

Resolution: *Analysis of test results are nearly complete; additional resources were added to the task in December. Schedule expected to be recovered during summer FY01.*

- ***Cost:***

GW/VZ Integration Project	FY01 EAC	BCWP	ACWP	Variance
		$K	$K	$K
ER02 200 Area Remedial Actions	*4,186*	*711*	*639*	*72*
ER08 Groundwater Management	*31,011*	*10,121*	*10,277*	*(156)*
VZ01 Groundwater/Vadose Zone	*11,253*	*4,162*	*4,098*	*64*
TOTAL Groundwater	***46,450***	***14,994***	***15,014***	***(20)***

Green

PBS-ER02 – 200 Area Remedial Action(Assessment)

Cost Variance = ***$72K; 10.1%*** *[Last Month: $117K; 19.5%]*

Cause: *Public review of the TW-1 and TW-2 work plan was not required, thus eliminating the need for a revision of the Draft B work plan.*

Resolution: *Underrun will be used to perform additional remediation work.*

PBS-ER08 – Groundwater Management

Cost Variance = ***($156K); (1.5%)*** *[Last Month: ($64K); (0.8%)]*

Cause: *Increase in PNNL scope supporting the RCRA Ecology Comprehensive Groundwater Monitoring Evaluation (CME) at T, TX-TY tank farms, and Purgewater Strategy revisions; and a cost increase due to PNNL rate increases. Overrun is offset by sample collection/analysis underruns due to canceling some well trips/analyses; other contractor's costs being less than planned.*

PROJECT STATUS (COST/SCHEDULE) continued: *GW/VZ*

Resolution: *Cost overrun has been trended.*

PBS-VZ01 – Groundwater/Vadose Zone

Cost Variance = ***$64K; 1.5%*** *[Last Month: ($10K); (0.3%)]*

Cause: *Phase I characterization FEPs review required fewer resources than planned; offsetting accrual in System Assessment Capability (SAC) historical matching related to system enhancements.*

Resolution: *Underrun will be used to perform other activities. SAC is investigating ways to streamline the overall history matching and initial assessment runs.*

REGULATORY ISSUES: *GW/VZ*

M-13-00x and M-20-xx Series: *RL management, working closely with the Environmental Protection Agency (EPA), Ecology, and the Hanford Advisory Board (HAB), has developed a more streamlined approach for the remediation of the 200 Area non-tank farm related operable units on the Hanford Site. The existing baseline for soil characterization in the 200 Area Remedial Action Project shows a completion of the characterization of 23 operable units by the year 2008. The improved, more focused approach calls for completion of the characterization of 12 representative analogous waste site operable units by 2008. The first TPA milestone that requires modification under the streamlined approach is M-13-00L (due December 31, 2001).*

Yellow

Status: *In the March/April timeframe, RL will hold a workshop with the regulators to confirm revised interim M-13 and M-20 milestones based on the improved approach to 200 Area assessment which supports the Hanford site outcomes. It is anticipated that M-13-00x major milestone adjustments can be addressed with the regulators once the revised FY02 DOE budget is approved.*

200-CW-1 Gable Mountain/B Pond and Ditches Feasibility Study: *The regulatory framework for completing the FS is not yet established. This impacts the completion of Tri-Party Agreement Milestone M-15-38A, "Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group FS and 216-B-3 Pond System RCRA TSD Unit Closure Plan and Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Proposed Plan/Proposed RCRA Permit Modification" (due November 30).*

Green

Status: *A detailed path forward for addressing regulator issues on (1) the adequacy of ecological data, (2) the application of new MTCA requirements, and (3) land-use scenario development has been developed and transmitted to the regulators. The regulators have concurred with the recommended approach. A draft TPA change request will be prepared reflecting the recommended approach to complete the 200-CW-1 feasibility study.*

200-PW-1 Plutonium/Organic-Rich Process Remedial Investigation/Feasibility Study Work Plan: *EPA has stated their intention to have the 200-PW-1 work plan incorporate all investigations needed to answer questions surrounding the source of carbon tetrachloride contamination in the vadose zone. EPA will not approve the 200-PW-1 work plan until all scope is covered. This is a significant expansion of the workscope for completing the 200-PW-1 work plan, and a potential impact is that Tri-Party Agreement Milestone M-13-26, "Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan" (due June 29), will not be met.*

Green

Status: *Options analysis is being performed. A draft Tri-Party Agreement change request was transmitted to EPA on March 15. Discussions are being scheduled in late March with EPA to resolve this issue.*

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): *GW/VZ*

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): *GW/VZ*

None identified at this time.

INTEGRATION ACTIVITIES: *GW/VZ*

None identified at this time.

Surveillance / Maintenance and Transition Projects (SM&T)

SECTION C – TRANSITIONING THE CENTRAL PLATEAU

Financial / Performance Measures data as of month-end February.
All other data as of March 22, 2001 (unless otherwise noted).

Surveillance/Maintenance & Transition Projects (SM&T):

ACCOMPLISHMENTS: *SM&T*

Surveillance and Maintenance (S&M): *S&M activities that were performed in February to ensure inactive facility integrity and safety included the following:*

- *Completion of the 218-W-2A waste burial site interim stabilization and work package closeout. Interim stabilization consisted of stabilizing the soil site with gravel and application of a sterilant to prevent weed growth.*
- *Completion of site excavation and crossover piping removal for the hexone tanks, and began preparation for in-tank sampling to support an interim stabilization decision planned later this calendar year.*
- *Completion of initial mobilization and pre-job briefing of the 216-B-24 retention basin interim stabilization effort.*
- *Awarding of the subcontract to provide a crosswalk of the new 10 Code of Federal Regulations (CFR) 830 regulations to Authorization Basis documents for nuclear facilities. Formal submittal is expected in March.*
- *Awarding of the subcontract for removal of asbestos-containing materials (ACM) at the 181-N pump house adjacent to the Columbia River and the 224-U UO_3 Plant Concentration Facility located in the 200 West Area. Subcontracted workscope includes removal of approximately 217 cubic meters (712 cubic feet) of nonradioactive ACM located on pumps, pipes, and river screen wash systems, and approximately 496 linear meters (1,625 linear feet) of ACM-encased piping from various steam and condensate lines.*
- *Issuance of the Radiation Area Remedial Action (RARA) annual report for FY00. Interim stabilization projects completed in FY00 included the Strontium Semi-Works (200 East Area), Reduction Oxidation (REDOX) Railroad Cut (200 West Area), and the 105-KE/KW Acid Tanks (100 K Area).*
- *Continuation of hazard mitigation activities and conducting several tours of B Reactor. Noted visitors included representatives from the Nonproliferation Group and the State Department technical analysts.*

Green

SAFETY/ISMS/CONDUCT OF OPERATIONS: *SM&T*

See Executive Summary.

BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: *SM&T*

None identified at this time.

LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: *SM&T*

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): *SM&T*

- ***DOE Secretarial:***

None identified at this time.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: *SM&T*

- ***DOE EM Performance Agreement:***

None identified at this time.

- ***TPA Milestones:***

None identified at this time.

- ***DNFSB Commitment:***

None identified at this time.

PERFORMANCE OBJECTIVES: *SM&T*

None identified at this time.

PERFORMANCE MEASURES/METRICS: *SM&T*

None planned in FY01.

STRETCH AND SUPERSTRETCH GOALS: *SM&T*

None identified at this time.

PROJECT STATUS (COST/SCHEDULE): *SM&T*

- ***Schedule:***

Surveillance/Maintenance & Transition Project	BCWS	BCWP	Variance
	$K	$K	$K
ER05 Surveillance & Maintenance	*6,362*	*5,619*	*(743)*
ER07 Long-Term Surveillance & Maintenance	*4*	*4*	*0*
TOTAL SM&T	***6,366***	***5,623***	***(743)***

Green

PBS-ER05 – Surveillance and Maintenance
Schedule Variance = ***($743K); (11.7%)*** *[Last Month: ($758K); (14.5%)]*

Cause: *Additional time was needed to evaluate new sampling and video equipment on the Hexone tank project. This also delayed work on the IMUST strategy planning.*

Resolution: *Sampling and video taping of the tanks interior contents will occur simultaneously, compressing the schedule. Work has started on a draft IMUST documents. In March and April, staff will be reassigned to this work; full recovery is expected.*

Cause: *In the DWP, the assumption was that the asbestos abatement subcontract would be awarded and expended in November 2000. Combining 100 and 200 Area asbestos work subsequently resulted in a subcontract where work will commence in April 2001.*

Resolution: *A subcontract has been placed to execute work scope activities. Work is anticipated to start in April and be completed by August 2001. No further corrective action required.*

PBS-ER07 – Long-Term Surveillance and Maintenance (BCWS $59K for FY01)
Schedule Variance = N/A

PROJECT STATUS (COST/SCHEDULE) continued: *SM&T*

- ***Cost:***

Surveillance/Maintenance & Transition Project	FY01 EAC	BCWPS	ACWP	Variance
		$K	$K	$K
ER05 Surveillance & Maintenance	*13,707*	*5,619*	*5,614*	*5*
ER07 Long-Term Surveillance & Maintenance	*55*	*4*	*0*	*4*
TOTAL SM&T	***13,762***	***5,623***	***5,614***	***9***

Green

PBS-ER05 – Surveillance and Maintenance
Cost Variance = ***$5K; 0.1%*** *[Last Month: $230K; 5.1%]*

Cause: *Underruns in 200 Area S&M work taking fewer resources than planned; offset by Hexone tank sampling cost overruns due to additional engineering, job hazard analysis.*

Resolution: *Underrun has been trended and is reflected in EAC, but offsets are expected when work on passive vent sealing is initiated. Passive vent sealing work will be performed in last half of year decreasing underrun. A portion of the overrun at CDI will be recovered with expected savings from shipping samples to an offsite laboratory for analysis (expected in March).*

PBS-ER07 – Long-Term Surveillance and Maintenance (BCWS $59K for FY01)
Cost Variance = N/A

REGULATORY ISSUES: *SM&T*

None identified at this time.

EXTERNAL ISSUES (i.e. HAB, Congress, etc.): *SM&T*

None identified at this time.

DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): *SM&T*

None identified at this time.

INTEGRATION ACTIVITIES: *SM&T*

None identified at this time.